

MEMORANDUM OF UNDERSTANDING  
BETWEEN THE WALTER REED ARMY INSTITUTE OF RESEARCH,  
UNITED STATES ARMY MEDICAL RESEARCH AND MATERIEL COMMAND, AND  
THE NATIONAL MUSEUM OF NATURAL HISTORY,  
SMITHSONIAN INSTITUTION

The Walter Reed Biosystematics Unit (WRBU), Walter Reed Army Institute of Research (WRAIR), United States Army Medical Research and Materiel Command (MRMC), and their predecessors, and the Section of Entomology (SOE), Department of Systematic Biology, National Museum of Natural History (NMNH), Smithsonian Institution (SI), have worked together effectively since 1961. During that time the NMNH Mosquito Collection has developed into the largest in the world, comprising over 1.5 million specimens. The missions of these organizations are separate and distinct, though complementary. Both groups of scientists conduct basic research and provide critical information and scientific services to scientists and the general public. In addition, WRBU has the further charge of emphasizing research and information on medically important arthropods of interest to the military.

This document defines the basis for cooperation, delineates responsibilities and describes the type of work to be done. It provides formal definitions governing the exceptionally positive and productive 40-year relationship between WRBU and SOE. These organizations will continue to work together to build the national treasure embodied in the National Entomological Collections, which is of mutual benefit to the WRAIR and SI as well as the U.S. military and the international scientific community.

A. SPACE. It is mutually agreed: The NMNH will allocate space and associated utilities to the WRBU in return for the WRBU's performance of collection management activities defined in this document. Space allocations will be reviewed by the SOE Head and the WRBU Manager on a regular basis with reasonable advance notification of projected changes in personnel and space utilization. Final decisions regarding the allocation of SI space for the WRBU will ultimately reside with the Office of the Director, NMNH.

B. PERSONNEL. It is mutually agreed that the Director, WRAIR, shall be free to move agents/employees into or out of the WRBU as mission requirements dictate. For the purposes of this collaboration, WRBU personnel will be provided status as Smithsonian Institution Research Associates and with that, all of the rights and responsibilities inherent with that status.

C. COLLECTIONS/REPRINTS. It is mutually agreed:

1. The primary obligation of the WRBU to the joint effort pursuant to this agreement is the management and curation of the NMNH Mosquito Collection. As a secondary obligation, other insects of medical importance in the National Entomological Collections will be curated as resources and expertise become available. "Management and Curation" in this document is defined as maintenance and protection of specimens, handling of transactions including loans, and progress toward improvement of the collection. The WRBU concurs with the goals and standards of curatorial care established by the SOE for the National Entomological Collections, including the Mosquito Collection. The WRBU Manager will serve on the SI Entomology Collections Committee to enhance communication and knowledge about SOE operations and goals concerning collection management.

2. The SOE and the WRBU have jointly built and continue to build the NMNH Mosquito Collection for the mutual use and benefit of the international scientific community and general public. For specimens to be ultimately accessioned into the NMNH Collection, it is understood that the WRBU will provide specimen processing supplies (e.g., pins, labels, slides, coverslips, mounting media) and the SI shall assume the costs for storage equipment (e.g., trays, insect drawers, slide boxes, cases, naphthalene).

3. Both organizations agree to adhere to established policies outlined in the NMNH and Departmental Collections Management documents concerning specimen registration and inventory.

4. The SOE and the WRBU have correspondence, literature, and document files within their areas of expertise and cooperate in maintaining and upgrading these information sources. The WRBU recognizes that reprint files acquired by its staff and their predecessors for taxonomic research based on the NMNH Mosquito Collection form an integral and inseparable part of the Collection itself. No classified materials may be maintained by WRBU, and all research findings must be unrestricted. Official laboratory notebooks are the property of the WRAIR.

D. FACILITIES. It is mutually agreed:

1. The NMNH will provide WRBU personnel with access to its entomological collections, libraries and other SI facilities that are available to SI research associates. The SI reserves the right to revoke these privileges temporarily or permanently if it is determined by the NMNH Director that the presence of a WRBU staff member is disruptive to the SI work environment or is considered to be a risk to the safety of SI collections, property, or personnel. Such actions will be taken only after consulting with the WRBU Manager, but the Director, NMNH, makes the final decision.

2. For SOE personnel, SI Research Associates, visiting scientists, and mosquito researchers, the WRBU will provide assistance in locating and examining specimens contained in the NMNH Mosquito Collection. The NMNH Collection is an international asset and no individual, regardless of nationality or international affiliation, will be prohibited from using SI space allotted the WRBU to examine specimens in the collection, provided that these individuals comply with NMNH regulations and guidelines.

3. WRBU and SOE will maintain a molecular entomology laboratory at the MSC for joint use of WRBU and SOE personnel.

4. Issues affecting the safety of SOE and WRBU personnel will be referred to the NMNH Safety Office 5. Routine facility operation and maintenance expenses (e.g., utilities, repairs to facility, refurbishing, and trash removal) will be borne by the NMNH.

E. BUDGET, SUPPLIES AND EQUIPMENT. It is mutually agreed:

1. This Memorandum of Understanding defines in general terms the basis on which the parties involved will cooperate. It does not constitute a financial agreement to serve as a basis for expenditures. Each party will handle and expend its own funds in furtherance of its obligations set forth herein. All expenditures of Federal funds pursuant to this Memorandum of Understanding must be in accordance with MRMC and SI rules and regulations within their respective appropriations.

2. Either party shall be free to purchase and use any equipment needed to achieve the goals of this agreement. All equipment located on SI premises will comply with SI safety regulations. Equipment requiring significant SI space or alteration of physical facilities will be discussed by the SOE Head and the WRBU Manager. Final decisions regarding significant equipment space allocations reside with the Director of the NMNH; those regarding physical plant alteration ultimately reside with the NMNH Director and the Director of the Museum Support Center (MSC), where the WRBU is located. Equipment purchased from SOE funds shall remain the property of the SI, and subject to its removal and disposition.

3. Within budgetary constraints, the SOE will provide the WRBU with necessary storage materials for specimens accessioned into the NMNH Mosquito Collection. The WRBU will provide necessary specimen processing materials for the proper curation and enhancement of the collection. Furthermore, the WRBU/WRAIR will directly or indirectly support or fund one or more individuals, to fully integrate and upgrade the various portions of the mosquito collection whenever funds and/or personnel are available. The goal is to establish a single, functional mosquito collection that can be effectively managed and curated through the routine efforts of the WRBU staff.

4. The SOE and the WRBU will separately provide their own office and research supplies and equipment.

5. The obligations set forth herein and assumed by each of the cooperating parties are contingent upon the availability of funds.

F. STATUS. It is mutually agreed:

1. For purposes of this agreement, WRBU employees shall not be considered to be agents or employees of the SI, nor shall SI employees be considered to be agents or employees of the WRBU/WRAIR. For administrative purposes (pay, leave, benefits, career management) each organization will obtain support from their parent organizations.

2. The work environment and behavior of WRBU personnel on SI premises will be governed by WRAIR and SI regulations and policies. Misconduct of WRBU personnel on SI premises shall be handled by the appropriate WRAIR officials whose actions will be taken in full awareness of SI policies, procedures, and ethical standards. Misconduct of SI personnel that affects WRBU employees on SI premises will be dealt with according to SI rules and regulations in consultation with appropriate WRAIR officials.

G. COOPERATION/COMMUNICATION. It is mutually agreed: 1. Regular meetings will be held between the WRBU Manager and the SOE Head, at least once every three months, to review programs and communicate about potential developments that could affect the cooperation described in this document, especially changes in program responsibilities and personnel. An annual review meeting will include the SOE Head, Department of Systematic Biology Chair, the Associate Director for Research and Collections (ADRC), NMNH, the Chief of the Department of Entomology, WRAIR, and the Director of the Division of Communicable Diseases and Immunology, WRAIR.

2. Both organizations will cooperate in areas of mutual interest and concern in research, collection care, and information management to expand on the current atmosphere of excellence and leadership in collection-based research.

3. Either party to this agreement shall be free to use any of the results of this cooperation in its official correspondence or publication provided due credit is given to the other party for contributions to the effort. This does not apply to popular publication of previously published technical data. Publication may be joint or independent, always giving due credit to the cooperation and recognizing, within proper limits, the rights of the individuals doing the work. The Principle Investigator(s) of a project or program hereunder, consistent with prevailing applicable policies of the WRAIR and the SI, shall determine the point in time at which any data generated pursuant to such project or program may be published. In case of failure to agree as to the manner of publication or interpretation of the results, either party may publish after due notice and submission of the proposed manuscripts to the other. In such instances, the party publishing the data will give due credit to the cooperation but will assume full responsibility for any statements on which there is a difference of opinion. All publications must be unclassified and freely available to the international scientific community.

4. On publications, the address of WRBU will be listed as Walter Reed Biosystematics Unit, Walter Reed Army Institute of Research, Museum Support Center, National Museum of Natural History, Smithsonian Institution, Washington DC 20560. A footnote to each publication will be added as follows: "This research was performed under a Memorandum of Understanding between the Walter Reed Army Institute of Research and the Smithsonian Institution, with institutional support provided by both organizations."

#### H. PATENTS AND INVENTIONS. It is mutually agreed:

1. "Subject Inventions" shall mean any invention conceived or first reduced to practice under this Document, and which is able to be patented or protected under Title 35 of the United States Code, under Section 2321 of Title 7 of the United States Code, et seq., or under the patent laws of a foreign country and/ or in accordance with the patent policies of the WRAIR and the SI, a trust instrumentality of the United States.

2. Each party shall promptly make written disclosure to discuss and coordinate with one another the most appropriate timing for the publication or other disclosure of Subject Invention(s) in order to preserve the patent rights of said Parties. Emphasis will be given in such disclosure or publication coordination to maintaining and protecting the research and publication needs of the principle scientist(s) involved with the Subject Invention(s). It is understood that patent protection shall be promptly and diligently sought, as appropriate.

3. Each party shall provide, when requested by the other, all information in its possession pertaining to a Subject Invention that may be necessary or useful in the preparation, filing, and prosecution of patent applications covering the Subject Invention.

4. Each party shall promptly make written disclosure to each other of Subject Invention(s), and said information shall be treated in confidence by the receiving party until such time as a patent application is undertaken

5. All rights, title, and interest in any Subject Invention(s) made solely by employee(s) of the WRBU/WRAIR shall be owned by WRAIR; all rights, title, and interest in any Subject Invention(s) made solely by employee(s) of the SOE/SI shall be owned by the SI.

6. All rights, title, and interest in any Subject Invention(s) made solely by at least one (1) employee of the WRBU and at least one (1) employee of the SOE shall be jointly owned by the WRAIR and the SI. At such time as it is decided that a patentable item is jointly owned, both

parties shall negotiate in good faith an appropriate sharing of costs and benefits in accordance with applicable rules and regulations.

1. MEMORANDUM OF UNDERSTANDING OVERSIGHT AND REVIEW. It is mutually agreed:

1. This Memorandum of Understanding (MOU) will be reviewed annually during the month of January, but may be reviewed at any time upon request by either party. The SOE Head, Department of Systematic Biology Chair and ADRC will represent the SI and the WRBU Manager and the Chief, Department of Entomology and Director Division of Communicable Diseases and Immunology, WRAIR, will represent the WRAIR during the review.

2. The SOE Head and the WRBU Manager are charged with carrying out the provisions and intent of this MOU.

3. This MOU may be amended or otherwise modified in writing upon mutual agreement of both parties thereto and such written amendments or modifications shall be incorporated herein by reference.

4. This MOU may be terminated unilaterally by either party hereto upon 90 days prior written notice to the other. Adequate time shall be allowed by both parties for existing projects or programs to be completed or otherwise brought to a conclusion.

5. Copies of all correspondence concerning this MOU shall be sent to the WRBU Manager, Chief, Department of Entomology, WRAIR, the SOE Head, the Department of Systematic Biology Chair and the ADRC.

6. This MOU shall become effective as of the last date of signature below



Daniel L. Jarboe  
Colonel, U.S. Army  
Walter Reed Army Institute of Research



J. Dennis O'Connor  
Acting Director, National Museum  
Natural History  
Smithsonian Institution