Appendix A

Example Cooperative Research and Development Agreement (CRADA)

Text that appears in bold italics and between double lines is provided as clarification to the reader. These explanatory text sections will be included in the Environmental Impact Statement, but they will not be included in any final (signed) CRADA.

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT for a project between

[NAME OF PARK UNIT] / NATIONAL PARK SERVICE and [NAME OF COOPERATING RESEARCHER]

General Provisions

The General Provisions open with an introductory paragraph that identifies the parties to the CRADA (including name(s), legal form (i.e., individual, partnership, corporation, etc.), and address of the collaborating researcher as well as the name of the collaborating unit of the National Park System). In the event research activities involved the use of traditional knowledge or other valuable input from a Native American community or other source, such groups would be included as parties and/or beneficiaries to any benefits-sharing arrangement as appropriate.

This Cooperative Research and Development Agreement ("CRADA") is entered into by and between [name of cooperating researcher] ("Collaborator"), a [identify the cooperating researcher as either an "individual," "partnership," "corporation," or other legal entity and the state of legal residence or state where organized or incorporated] and maintaining its principal office headquarters at [office or other official address including street, city, state, country, and postal code], and [name of unit of the National Park System] of the National Park Service (NPS), U.S. Department of the Interior.

The following series of introductory "WHEREAS" clauses outline and summarize the intent of the CRADA consistent with Title II of the National Parks Omnibus Management Act of 1998 and the Federal Technology Transfer Act of 1986. They also reaffirm the Superintendent's "findings" associated with the activities authorized by the research specimen collection permit issued pursuant to 36 CFR 1.6 and 2.5.

WHEREAS, NPS and Collaborator wish to engage in cooperative activities to promote the conservation, protection, perpetuation, and management of biological diversity while undertaking scientific research that includes investigating potentially useful applications and processes that might result from research involving certain biological materials collected from [name of collaborating unit of the National Park System] pursuant to a permit issued under 36

WHEREAS, it is the intention of NPS to improve the conservation, management, protection, and perpetuation of park resources to the fullest extent possible consistent with the statutory mandate "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 USC § 1); and

WHEREAS, it is the intention of NPS to cooperate in activities that "assure that management of units of the National Park System is enhanced by the availability and utilization of a broad program of the highest quality science and information" (16 USC § 5932); and

WHEREAS, NPS coordinates research activities, facilitates the exchange of research-related information pertaining to the natural resources found in units of the National Park System, and otherwise manages the use of national park resources for purposes of scientific study by Federal and non-Federal public and private agencies, organizations, individuals, or other entities (16 USC § 5935(a)), which will be supported by the cooperative research activities authorized by this CRADA; and

WHEREAS, Collaborator is dedicated to [description of Collaborator's principal scientific activity, which could include but not be limited to the discovery and development of new bioactive materials for chemical synthesis, diagnostics, industrial and pharmaceutical uses, etc.], and agrees to cooperate with NPS to undertake beneficial scientific research relating to certain biological materials existing in and collected from [name of collaborating unit of the National Park System], to share information and data relating to such research, and to protect and monitor those materials and other resources at [name of collaborating unit of the National Park System] as required by NPS; and

WHEREAS, Collaborator agrees to apply the highest professional and scientific standards in its research and development activities undertaken at [name of collaborating unit of the National Park System], and to pursue the discovery and development of new materials or other research results from biological specimens collected from [name of collaborating unit of the National Park System] in ways that advance the "economic, environmental, and social well-being of the United States" consistent with the aims of the Federal Technology Transfer Act of 1986 (15 USC § 3701); and

WHEREAS, Collaborator agrees and recognizes that efforts by NPS to "conserve the scenery and the natural and historic objects and the wild life therein" contribute significantly to the research and development of potentially useful discoveries resulting from scientific research activities undertaken at units of the National Park System; and

WHEREAS, Collaborator further agrees and recognizes that the aforesaid protection of national park resources requires sophisticated interdisciplinary scientific work by NPS staff and coordinated effort by NPS management "necessary to assure the full and proper utilization of the results of scientific study for park management decisions" (16 USC § 5936); and

WHEREAS, NPS agrees and recognizes that Collaborator has invested and intends to

continue to invest significant time, expertise, and expense in research and development activities and management of technology that facilitates development of useful discoveries resulting from scientific research activities involving research specimens collected from [name of collaborating unit of the National Park System]; and

WHEREAS, the NPS Director has determined that [name of collaborating unit of the National Park System] is a "Federal laboratory" within the meaning of 15 USC § 3710a(d)(2) because it is "a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the performance of research, development, or engineering by employees of the Federal Government."

Additional clauses may be added to describe and document the scientific and national park resource conservation purposes and intent of the cooperative research and development activities managed by the CRADA.

Now, therefore, in consideration of the promises contained in this agreement, the parties agree as follows:

Article 1. Legal Authority

Article 1 of the CRADA cites the principal statutory authorities that govern the CRADA (including the clause that authorizes a collaborating unit of the National Park System that satisfies the statutory definition of a "Federal laboratory" to retain the financial benefits resulting from the CRADA).

- 1.1 This agreement is authorized under the National Park Service Organic Act, as amended, 16 USC $\S\S$ 1–4; Federal Technology Transfer Act, as amended, 15 USC $\S\S$ 3701–3715; and, the National Parks Omnibus Management Act of 1998 (16 USC $\S\S$ 5931–5936).
- 1.2 Payments accepted and retained by [name of collaborating unit of the National Park System] from Collaborator are authorized under 15 USC § 3710a(b)(3).

Article 2. Definitions

Article 2 of the CRADA provides the substantive definitions that appear in the CRADA. The definitions that appear in the General Provisions are consistent with the definitions used in the Department of the Interior's handbook entitled 'Technology Transfer: Marketing Our Products and Technologies (A Training Handbook for the U.S. Department of the Interior),' first published in May 1996, and are consistent with standard CRADA provisions used by many Federal agencies. Supplemental definitions have been adopted from the Uniform

Biological Material Transfer Agreement developed by the National Institutes of Health and published in the Federal Register in March 1995 (60 Fed. Reg. 12771 (March 8, 1995)). Additional explanations concerning the meaning of certain definitions appear below.

Defined terms are grouped according to topical related subject matter for more convenient reference. The rights and obligations of the parties provided by the CRADA flow from a careful structuring of operative definitions. While technical, the definitions appearing in Article 2 of the General Provisions reflect the operative definitions derived from the above-referenced sources. Additional definitions that are pertinent to an individual CRADA that do not contradict the definitions provided in Article 2 of the General Provisions may be provided as supplemental definitions in the Statement of Work.

Defined terms appear in bold-faced print throughout the CRADA.

2.1 Definitions Relating to the CRADA and the Parties' Employees

2.1.1 Cooperative Research and Development Agreement

The term "Cooperative Research and Development Agreement" ("CRADA") means this document and all attachments describing research activities jointly undertaken by NPS and Collaborator.

2.1.2 Collaborator's Assigned Employees

The term "Collaborator's Assigned Employees" means those employees of Collaborator who are present at [name of collaborating unit of the National Park System] for a continuous period of more than two weeks.

2.2 Definitions Relating to Biological Material Collected from a Unit of the National Park System and Subsequent Research Use of Such Material

The term "Natural Products" is defined with reference to "Research Specimens" so that it is clear that Collaborator is authorized to collect or use for scientific purposes only those naturally occurring materials covered in a permit issued under 36 CFR 1.6 and 2.5. This definition also reinforces the prohibition against sale or commercial use of Research Specimens but does not extend the prohibition to the results of Collaborator's research activities involving Research Specimens, Progeny, or Unmodified Derivatives. Collaborator also is not authorized by the CRADA to collect or use for scientific research purposes any "Natural Products" apart from the specific Research Specimens covered in a permit issued under 36 CFR 1.6 and 2.5.

2.2.1 Natural Products

For purposes of this agreement, the term "Natural Products" means any naturally occurring Research Specimen located in or taken from [name of collaborating unit of the National Park System] pursuant to a permit issued under 36 CFR 1.6 and 2.5.

The term "Research Specimens" is defined broadly, and includes all specimens previously acquired by Collaborator from the collaborating unit of the National Park System pursuant to a permit issued under 36 CFR 1.6 and 2.5. Accordingly, research activities involving previously acquired samples would be covered by the benefits-sharing provisions contained in the CRADA.

2.2.2 Research Specimens

The term "Research Specimens" means those items Collaborator has authority to collect under the collection permit or permits issued by [name of collaborating unit of the National Park System] to Collaborator (copy of permit(s) attached hereto in Appendix A), or which otherwise were originally and lawfully collected from [name of collaborating unit of the National Park System].

2.2.3 Progeny

The term "Progeny" means any unmodified descendant from Research Specimens, such as virus from virus, cell from cell, or organism from organism, that are cultivated by Collaborator.

2.2.4 Unmodified Derivatives

The term "Unmodified Derivatives" means substances created by Collaborator that constitute an unmodified functional subunit or product expressed by Research Specimens or Progeny. Some examples include: subclones of unmodified cell lines, purified or fractionated subsets of Research Specimens or Progeny, proteins expressed by DNA/RNA obtained from Research Specimens or Progeny, or monoclonal antibodies secreted by a hybridoma cell line.

2.3 Definitions Relating to Data and Data Rights

2.3.1 Background Intellectual Property

The term "Background Intellectual Property" ("BIP") refers to a patent or patent application covering an Invention or discovery of either party, or a copyrighted work, a mask work, trade secret, or trademark developed with separate funds outside of the CRADA by one of the parties or with others. BIP is not considered as a Subject Invention.

2.3.2 Generated Information

The term "Generated Information" means information produced in the performance of the CRADA.

2.3.3 Proprietary Information

The term "**Proprietary Information**" means trade secrets or commercial or financial information that is privileged or confidential within the meaning of 5 USC \S 552(b)(4), obtained in the conduct of research or as a result of activities under the terms of this CRADA from a non-Federal party participating in this CRADA, as provided at 15 USC \S 3710a(b)(1)(A).

2.3.4 Protected CRADA Information

The term "Protected CRADA Information" means Generated Information that is marked as being Protected CRADA Information by a party to this agreement and that would have been Proprietary Information had it been obtained from a non-Federal entity.

2.3.5 Subject Data

The term "Subject Data" means all recorded information first produced in the performance of this CRADA.

2.4 Definitions Relating to Intellectual Property Rights

2.4.1 Intellectual Property

The term "Intellectual Property" means patents, trademarks, copyrights, trade secrets, mask works, and other forms of comparable property protectable by Federal, state, or foreign laws.

2.4.2 Created

The term "created" in relation to any copyrightable software work means when the work is fixed in any tangible medium of expression for the first time, as provided for at 17 USC § 101.

2.4.3 Made

The term "made" in relation to any Invention means the conception or first actual reduction to practice of such Invention.

2.4.4 Invention

The term "Invention" means any invention or discovery that is or may be patentable or otherwise protected under Title 35 of the United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 USC § 2321 *et seq.*).

2.4.5 Subject Invention

The term "Subject Invention" means any Invention of Collaborator or NPS conceived or first actually reduced to practice in the performance of work under this CRADA.

2.5 Definitions Relating to Research Results

2.5.1 Modifications

The term "Modifications" means substances created by Collaborator which contain / incorporate Research Specimens, Progeny, or Unmodified Derivatives.

The term "Product" is defined to be distinguished from both "Research Specimens" and "Natural Products" (with focus on the potentially valuable results of Collaborator's research activities involving Research Specimens). All benefits-sharing obligations relate to revenues or other benefits generated from "Products" as distinguished from "Research Specimens" or "Natural Products" as defined in the General Provisions. However, the term "Product" also includes valuable materials developed from "Progeny" and "Unmodified Derivatives" as defined elsewhere in Article 2.

2.5.2 Product

The term "**Product**" means any **Modifications**, **Subject Invention** or any other commercially valuable or otherwise useful material, compound or useful combination of compounds, protein, or metabolite recovered, obtained, derived, resulting, or otherwise isolated by scientific research conducted on **Progeny**, **Unmodified Derivatives** or a **Research Specimen** originally acquired from [name of collaborating unit of the National Park System], or any derivative or analog of such material, compound, protein, metabolite or other isolate, or any discovery which is or may be patentable or otherwise protected under Title 35 of the United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 USC § 2321 et seq.) and developed from **Progeny**, **Unmodified Derivatives**, or **Research Specimens** originally acquired from [name of collaborating unit of the National Park System].

2.5.3 Commercial Purpose

The term "Commercial Purpose" means the sale, lease, license, or other transfer of any Progeny, Unmodified Derivatives, Modifications, Subject Invention or Product for value received, including but not limited to scientific research uses of any Progeny, Unmodified Derivatives, Modifications, Subject Invention or Product by Collaborator in the performance of any contract research, screening compound libraries, or the conduct of research activities that result in any sale, lease, license, or other transfer of any Progeny, Unmodified Derivatives, Modifications, Subject Invention or Product.

The definition of the term "Net Sales" as used in the CRADA is based on a definition used by the Public Health Service (National Institutes of Health) in licenses authorizing use of biological materials.

2.5.4 Net Sales

The term "Net Sales" means the total gross receipts for sales by Collaborator, its licensees or sublicensees of Progeny, Unmodified Derivatives, Modifications, Subject Inventions, or Product(s), or copyrighted works created using the results of research under this CRADA, and from otherwise making Progeny, Unmodified Derivatives, Modifications, Subject Invention(s), or Product(s) available to others without sale, whether invoiced or not, less returns and allowances actually granted, packing costs, insurance costs, freight out, taxes and excise duties imposed on the transaction (if separately invoiced), and the wholesaler and cash discounts in amounts customary in the trade. No deductions shall be made for commissions paid to individuals, whether they be with independent sales agencies or regularly employed by Collaborator, its licensee or sublicensees, or for the cost of collections.

Article 3. Statement of Work

The "Statement of Work" is the detailed description of the research work to be accomplished pursuant to the CRADA and describes in detail what each participant will do to reach the stated objective(s) of the CRADA. Article 3 of the General Provisions simply references the Statement of Work which appears as an attachment to the General Provisions. For more detail about preparing a Statement of Work according to Department of the Interior guidelines, see the Statement of Work section.

3.1 Cooperative research performed under this CRADA shall be performed in accordance with the attached Statement of Work, which is incorporated by reference into this agreement. The parties may modify the initial Statement of Work by mutual agreement and incorporate it herein by amendment as set out in paragraph 15.9.

Article 4. Reports

Article 4 contains the provisions that govern Collaborator's reporting obligations under the CRADA. The requirements are more detailed than the general annual reporting requirement that exists under NPS Scientific Research and Collecting Permits, and includes scientific as well as economic information relating to any products resulting from CRADA-related research. The more detailed scientific research reports are intended to be useful to park management in furtherance of the objectives of the National Parks Omnibus Management Act of 1998. In addition, the economic data reporting requirements are intended to assist with compliance of any financial obligations assumed by Collaborator pursuant to the CRADA.

4.1 Research Reports

As required by the collection permits that [name of collaborating unit of the National Park System] issued to Collaborator, Collaborator will prepare and provide to NPS a written report concerning the research activities authorized by the collection permits, which shall include, but not be limited to, such information as the Superintendent of [name of collaborating unit of the National Park System] may require, including, but not limited to, all information required under this CRADA. NPS shall have the right to use such reports for any Governmental purpose including but not limited to the conservation of natural resources at [name of collaborating unit of the National Park System]. In the event Collaborator asserts that particular information delivered to NPS is proprietary, Collaborator agrees to provide to NPS a nonconfidential non-proprietary summary of such information for public disclosure.

4.2 Payment Reports

Concurrently with each payment, or at such other time as payments are due, Collaborator shall submit a written report to NPS setting forth (a) the period for which the payment is made, (b) the amount, description, and aggregate Net Sales of Progeny, Unmodified Derivatives, Modifications, Subject Invention(s), or Product(s) sold or otherwise disposed of, upon which a payment is payable for such completed calendar year as provided under this CRADA, (c) the total gross income realized by Collaborator from the sale, licensing, or otherwise making Progeny, Unmodified Derivatives, Modifications, Subject Invention(s), or Product(s) available to itself and others without sale, during such completed calendar year, and (d) the resulting calculation pursuant to this paragraph 4.2 of the amount of all payments due thereon. If no payments are due NPS for any report period, the report shall so state.

4.3 Copyright Reports

Concurrently with each payment of royalties on copyrighted materials as required by Appendix B, or at such other time as payments are due, Collaborator shall submit a written report setting forth the period for which the payment is made, the amount and a description of the copyrighted works upon which a royalty is payable, the net sales or other income received therefrom by Collaborator, and the amount of royalties due thereon. If no royalties are due NPS for any report period, the report shall so state.

The recordkeeping provisions contained in paragraph 4.4 require Collaborator to keep documents necessary to allow verification of accurate payments due to NPS. Collaborator also agrees to allow audit of its books and records to confirm accuracy of payments and related calculations if deemed necessary by NPS. These provisions are intended to assist in compliance with benefits-sharing obligations.

4.4 Records

Collaborator agrees to keep records showing the sales or other dispositions of all works upon which payments are due under the provisions of this CRADA in sufficient detail to enable NPS to determine the payments payable hereunder by Collaborator. Collaborator agrees to retain the records for a minimum period of five (5) years from the date a subject payment is due. Collaborator further agrees to permit an auditor selected by NPS to examine its books and records from time to time during its ordinary business hours and not more often than once a year to the extent necessary to verify the reports provided for in this Article 4. NPS will bear the initial expense of the audit. If the audit indicates that NPS was underpaid royalties by at least ten percent (10%) for any calendar year, or five thousand dollars (\$5000.00), whichever is greater, Collaborator will reimburse NPS for the expense of the audit, together with an amount equal to the additional royalties to which NPS is entitled.

Article 5. Collaborator's Benefits-Sharing Obligation

Article 5 creates the general benefits-sharing obligation under the CRADA, and includes instructions concerning method and place of payments, total estimated in-kind and financial contributions from Collaborator, plus interest in the event of overdue payments discovered during the course of an audit. Article 5 allows the parties to defer negotiation of specific benefits-sharing terms until such time as Collaborator desires to use its research results for some "Commercial Purpose" as defined in Article 2. However, Collaborator is prohibited from using any of its research results for any "Commercial Purpose" until the benefits-sharing terms required under Article 5 are completed. NPS is not obligated to approve any use of research results for commercial purposes desired by Collaborator.

- 5.1 Collaborator hereby agrees to make the payments and other contributions set forth in Appendix B, which shall be used by [name of collaborating unit of the National Park System] for natural resource conservation purposes only. Unless otherwise specified, Collaborator agrees to make all payments to NPS in U.S. Dollars, net of all non-U.S. taxes (if any), by check or bank draft drawn on a United States bank and made payable to [name of collaborating unit of the National Park System]." The parties estimate Collaborator's total contribution at a minimum of US\$[insert dollar amount] in funds plus future royalties, and in-kind services and resources valued at US\$[insert dollar amount].
- 5.2 The contribution of [name of collaborating unit of the National Park System] shall be in the form of resource protection, labor, expertise, equipment, facilities, information, computer software, and other forms of laboratory support, subject to available funding.
- 5.3 Collaborator will make all payments to [name of collaborating unit of the National Park System] in accordance with provisions of Appendix B. All payments by Collaborator shall be mailed to the following address:

[insert mailing address of Superintendent of collaborating unit of the National Park System]

- 5.4 Any overpayments by Collaborator shall be offset against payments due the following year.
- 5.5 If an audit described in paragraph 4.4 above indicates that payments are overdue to NPS, an interest charge will be assessed on the overdue amounts for each 30-day period, or portion thereof, that payment is delayed beyond the periods described in Appendix B. The percent of interest charged will be based on the current value of funds to the United States Treasury as published quarterly in the Treasury Fiscal Requirements Manual.
- 5.6 Collaborator agrees to provide written notification to NPS when any **Progeny**, **Unmodified Derivatives**, **Modifications**, **Subject Invention** or **Product** is to be used for any **Commercial Purpose** not less than sixty (60) days prior to such use to ensure compliance with the provisions of paragraph 5.1 of this CRADA.

Article 6. Recognition of Contribution from [Name of Collaborating Unit of the National Park System]

Article 6 contains a specific acknowledgement by Collaborator of the value of NPS's natural resources and conservation management expertise to scientific research and resulting discoveries.

6.1 Collaborator acknowledges that NPS retains ownership of the Research Specimens. If Collaborator desires to use or license Progeny, Unmodified Derivatives, Modifications, Subject Invention(s), or Product(s) for any Commercial Purpose, Collaborator agrees in advance of such use to negotiate in good faith with [name of collaborating unit of the National Park System] to establish the terms required to complete this Article 5.

6.2 Collaborator recognizes the value of the natural resources protected by NPS (including the Research Specimens Collaborator has collected from [name of collaborating unit of the National Park System]), and that the efforts and expertise that NPS has invested in the preservation, conservation, and protection of NPS natural resources will contribute significantly to the discovery of Subject Inventions and development of Modifications or Product(s) from Research Specimens collected from [name of collaborating unit of the National Park System]; and, as a result, Collaborator agrees that the U.S. Government has a compensable interest in any Progeny, Unmodified Derivatives, Modifications, Subject Invention(s), or Product(s) developed from Research Specimens collected from [name of collaborating unit of the National Park System].

Article 7. Patent Rights

Article 7 contains the main intellectual property rights provisions of the CRADA and are consistent with the intellectual property rights clauses used in CRADAs by other Federal agencies. The provisions are intended not to interfere with any party's rights under U.S. intellectual property rights laws. However, paragraph 7.1 contains a reporting obligation which provides a mechanism for NPS to learn about all potentially patentable inventions resulting from research involving research specimens collected from units of the National Park System.

7.1 Reporting

The parties agree to disclose to each other every **Subject Invention**, which may be patentable or otherwise protectable, within sixty (60) days of the time that an inventing party reports such **Subject Invention** to the person(s) responsible for patent matters in the inventing organization. These disclosures should be in sufficient enough detail to enable a reviewer

to make and use the invention under 35 USC § 112. The disclosure shall also identify any statutory bars, *i.e.*, printed publications describing the **Subject Invention** or public use or sale of the **Subject Invention** in the United States. The parties further agree to disclose to each other any subsequent statutory bar that occurs for a **Subject Invention** disclosed but for which a patent application has not been filed. All such disclosures shall be marked as "CONFIDENTIAL" under 35 USC § 205.

7.2 Collaborator Employee Inventions

Collaborator may retain title to any **Subject Invention** made solely by its employees. Collaborator agrees to file patent applications on such **Subject Invention** at its own expense and in a timely fashion. Collaborator agrees to grant to the U.S. Government a nonexclusive, nontransferable, irrevocable, paid-up license in the patents covering **Subject Inventions** developed by Collaborator's employees to practice the invention or have the invention practiced, throughout the world by or on behalf of the U.S. Government. Such nonexclusive license shall be evidenced by a confirmatory license agreement prepared by Collaborator in a form satisfactory to NPS.

7.3 NPS Employee Inventions

NPS, on behalf of the U.S. Government, shall have the initial option to retain title to each **Subject Invention** made by its employees under this CRADA. If a **Subject Invention** is made jointly by personnel of both parties under this CRADA, it and all patent applications and patents issued thereon shall be jointly owned by the parties, subject to the obligations contained in paragraphs 7.4 and 7.6 herein. NPS may release the rights provided for by this paragraph to employee inventors or to Collaborator subject to a license in NPS.

7.4 Filing of Patent Applications

The party having the right to retain title and file patent applications on a specific **Subject Invention** may elect not to file patent applications thereon provided that it so advises the other party within ninety (90) days from the date it reports the **Subject Invention** to the other party. Thereafter, the other party may elect to file patent applications on the **Subject Invention** and the party initially reporting such Subject Invention agrees to assign its right, title, and interest in such **Subject Invention** to the other party and cooperate with such party in the preparation and filing of patent applications thereon. The assignment of the entire right, title, and interest to the party pursuant to this paragraph shall be subject to the retention by the party assigning title of a nonexclusive, irrevocable, paid-up license to practice, or have practiced, the **Subject Invention** throughout the world. In the event that none of the parties to this CRADA elect to file a patent application on a **Subject Invention**, either or both (if a joint invention) may, at their sole discretion and subject to reasonable conditions, release the right to file to the inventor(s) with a license in each party of the same scope as set forth in the immediate preceding sentence.

7.5 Patent Expenses

All of the expenses attendant to the filing of patent applications as specified in paragraph 7.4 above shall be borne by the party filing the patent application. Any post-filing and post-patent

fees also shall be borne by the same party. Each party shall provide the other party with copies of the patent applications it files on any **Subject Invention** at the time the application is filed at the U.S. Patent & Trademark Office or patent office of another country. Each party also will provide the other party with the power to inspect and make copies of all documents retained in the official patent application files by the applicable patent office.

7.6 License Provisions

Collaborator, at any time, may license or sublicense in whole or in part, any rights and interests granted to Collaborator from NPS under the terms and conditions of this CRADA. Collaborator may exercise such right without obtaining additional authorization from NPS, but Collaborator expressly agrees that in so licensing or sublicensing, it will specifically reserve to NPS all rights and privileges provided in this agreement for NPS, including the provisions of Appendix B. In the event of a license or sublicense, Collaborator will notify NPS of each license and sublicense to enable NPS to call for the reports provided for in this agreement.

7.7 Enforcement of Jointly-Owned Patents

Collaborator must advise NPS of any events that cause Collaborator to suspect that a third party is or may be infringing on jointly owned patents resulting from research conducted under this CRADA (hereinafter referred to as "CRADA patents"). Collaborator must institute and diligently prosecute proper legal proceedings at Collaborator's own expense in the event of infringement of CRADA patents. Should Collaborator fail to institute such proceedings within ninety (90) days from receipt of written request from NPS to institute such proceedings, NPS may take the following actions:

- 1) Institute a suit in its own name as subrogee of Collaborator's rights to enforce the patent; or
- 2) Institute a suit against Collaborator for damages resulting from Collaborator's failure to terminate or abate the infringement.

In the event of institution of a suit for infringement by NPS pursuant hereto, it is understood that Collaborator may participate and be represented by its own counsel; however, any recovery damages shall be equitably apportioned, less the U.S. Government litigation costs. Either party may make reasonable settlements with respect to any infringements. Collaborator agrees to join in any legal proceedings brought by NPS if joinder is required by law.

Article 8. Copyrights

Article 8 contains the provisions relating to copyrighted material resulting from CRADA related research activities, and are consistent with the copyright provisions contained in CRADAs used by other Federal agencies.

8.1 Collaborator shall have the option to own the copyright in all software (including modifications and enhancement thereto), documentation, or other works created in whole

or in part by Collaborator under this CRADA, which is subject to being copyrighted under Title 17, United States Code. Collaborator shall mark any such works with a copyright notice showing Collaborator as the author or co-author and shall in its reasonable discretion determine whether to file applications for registration of copyright.

- 8.2 Collaborator agrees to grant to the U.S. Government, solely for its purposes, a nonexclusive, irrevocable, paid-up, worldwide license (hereinafter referred to as Government Purpose License) in all copyrighted software or other copyrighted works developed under this CRADA. The Government Purpose License ("GPL") conveys to the U.S. Government the right to use, duplicate, or disclose the copyrighted software or other works in whole or in part, and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only. Government purposes include competitive procurement, but do not include the right to have or permit others to use the copyrighted software or other works for commercial purposes.
- 8.3 Collaborator will clearly mark all copyrighted software or other works subject to the GPL with its name and the words "GOVERNMENT PURPOSE LICENSE."
- 8.4 Collaborator shall furnish to NPS, at no cost to NPS, at least one copy of each software, documentation or other work developed in whole or in part by Collaborator under this CRADA, subject to the terms and conditions of the GPL granted to NPS under paragraph 8.2.

Article 9. Copyright Royalties

Article 9 contains provisions acknowledging Collaborator's obligation to pay royalties on revenues earned from the licensing, assignment, sale, lease, or rental of any copyrighted work created under the CRADA.

9.1 Appendix B covers the obligations of Collaborator to compensate NPS from royalties produced from the sale or use of copyrighted materials. As provided in Appendix B, Collaborator shall pay to NPS royalties over the life of the copyright from the licensing, assignment, sale, lease, and rental (hereinafter referred to as "disposition") of any copyrighted work created under this CRADA.

Article 10. Data and Publication

Article 10 contains the provisions relating to the use of data resulting from research activities conducted under the CRADA, as well as the procedures relating to protection of proprietary information. The provisions of Article 10 are consistent with the data and publication provisions used in CRADAs by other Federal agencies.

10.1 Release Restrictions

NPS shall have the right to use all **Subject Data**, as defined in Article 2, for any Governmental purpose, but shall not release such **Subject Data** publicly except:

- 1) NPS, when reporting on the results of sponsored research, may publish Subject Data, subject to the provisions of paragraph 10.4 below; and
- 2) NPS may release such **Subject Data** where such release is required pursuant to a request under the Freedom of Information Act, as amended (5 USC § 552 *et seq.*); provided, however, that such data shall not be released to the public if a patent application is to be filed (35 USC § 205) until the party having the right to file the patent application has had a reasonable time to file.

10.2 Proprietary Information and Background Intellectual Property

10.2.1 Proprietary Information

Collaborator shall place a proprietary notice on all information it delivers to NPS under this CRADA that Collaborator asserts is **Proprietary Information**, as defined in Article 2. NPS agrees that it will use any information designated as proprietary that Collaborator furnishes to NPS under this CRADA, only for the purpose of carrying out this CRADA. NPS agrees not to disclose, copy, reproduce, or otherwise make available in any form whatsoever information designated as proprietary to any other person, firm, corporation, partnership, association, or other entity without the consent of Collaborator, except as such information may be subject to disclosure under the Freedom of Information Act, as amended (5 USC § 552, *et seq.*). NPS agrees to use its best efforts to protect information designated as proprietary from unauthorized disclosure. Collaborator agrees that NPS is not liable for the disclosure of information designated as proprietary that, after notice to and consultation with Collaborator, NPS determines may not lawfully be withheld or that a court of competent jurisdiction requires disclosure.

10.2.2 Background Intellectual Property

Both parties agree to identify in advance and during the course of the CRADA Background Intellectual Property (BIP), as defined in Article 2, that has value for the joint research but which was developed with separate funds outside the CRADA. BIP does not qualify as a Subject Invention and is not subject to a government use license.

10.3 Protected CRADA Information

- 10.3.1 Each party may designate as **Protected CRADA Information**, as defined in Article 2, any **Generated Information** produced by its employees, and with the agreement of the other party, mark any **Generated Information** produced by the other party's employees. All such designated **Protected CRADA Information** shall be appropriately marked.
- 10.3.2 For a period of five (5) years from the date the **Protected CRADA Information** is produced, the parties agree not to further disclose such **Protected CRADA Information** except:
- 1) as necessary to perform this CRADA; and

2) as mutually agreed by the parties in writing in advance.

10.3.3 The obligation of 10.3.2 above shall end sooner for any **Protected CRADA Information** which shall become publicly known without fault of either party, shall come into a party's possession without breach by that party of the obligations of 10.3.2 above, or shall be independently developed by a party's employees who did not have access to the **Protected CRADA Information**, or as required by the Freedom of Information Act, as amended (5 USC § 552, *et seq.*).

10.4 Publication

10.4.1 NPS may submit for publication the results of the research work associated with this project. Depending on the extent of contribution made, employees of Collaborator may be cited as co-authors.

10.4.2 NPS and Collaborator agree to confer and consult at least thirty (30) days prior to either party's submission for publication of **Subject Data** to assure that no **Proprietary Information** or **Protected CRADA Information** is released and that patent rights are not jeopardized. The party receiving the document for review has thirty (30) days from receipt to object in writing detailing the objections to the proposed submissions.

Article 11. Rights in Generated Information

Article 11 summarizes NPS's rights in data generated pursuant to research activities conducted under the CRADA.

11.1 The parties understand that the Government shall have unlimited rights in all **Generated Information** or information provided to the parties under this CRADA which is not marked as being copyrighted (subject to Article 8) or as **Proprietary Information** (subject to paragraph 10.2.1) or as **Protected CRADA Information** (subject to paragraph 10.3).

Article 12. Termination

Article 12 describes the procedures for termination of the CRADA by the parties. Either party may terminate at any time by giving thirty (30) days written notice to the other party. Termination, however, does not affect the obligations of the parties pursuant to Article 5 (Collaborator's Benefits-Sharing Obligation), Article 7 (Patent Rights), Article 8 (Copyrights), Article 9 (Copyright Royalties), Article 10 (Data and Publication), Article 11 (Rights in Generated Information), and Article 14 (Liability); the parties' obligations pursuant to all of the Articles of the CRADA survive termination pursuant to Article 12 and remain enforceable.

- 12.1 Collaborator and NPS each have the right to terminate this CRADA upon thirty (30) days notice in writing to the other party. In the event of termination by [name of collaborating unit of the National Park System], [name of collaborating unit of the National Park System] shall repay Collaborator any prorated portion of payments previously made to [name of collaborating unit of the National Park System] pursuant to Article 5.1 of the CRADA in excess of actual costs incurred by [name of collaborating unit of the National Park System] in pursuing this project. A report on results to date of termination will be prepared by [name of collaborating unit of the National Park System] and the cost of the report will be deducted from any amounts due to Collaborators from [name of collaborating unit of the National Park System].
- 12.2 In-kind payments received by NPS as provided in Appendix B may be retained in support of the project.
- 12.3 A report on results to date of termination will be prepared by Collaborator and the cost of the report will be deducted from any amounts due to NPS.
- 12.4 Termination of this CRADA by either party for any reason shall not affect the rights and obligations of the parties accrued prior to the effective date of termination of this CRADA. No termination or expiration of this CRADA, however effectuated, shall release the parties hereto from their rights, duties, and obligations under Articles 7, 8, 9, 10, 11, and 14, and payments due under Appendix B.

Article 13. Disputes

Article 13 contains the provisions relating to procedures intended to resolve any disputes arising between the parties under the CRADA.

- 13.1 Any dispute arising under this CRADA which is not disposed of by agreement of the parties shall be submitted jointly to the signatories of this CRADA. A joint decision of the signatories or their designees shall be the disposition of such dispute.
- 13.2 If the signatories are unable to jointly resolve a dispute within a reasonable period of time after submission of the dispute for resolution, the matter shall be submitted to the Director of the NPS, or his or her designee, for resolution.
- 13.3 Pending the resolution of any dispute or claim pursuant to this Article, the parties agree that they will diligently pursue performance of all obligations in accordance with the direction of the NPS signatory.

Article 14. Liability

Article 14 relates to the parties' liability for losses or damage incurred under the CRADA.

14.1 Property

The U.S. Government shall not be responsible for damages to any property of Collaborator provided to [name of collaborating unit of the National Park System] pursuant to this CRADA.

14.2 Collaborator's Employees

14.2.1 During any temporary assignment at [name of collaborating unit of the National Park System] facilities that may result from this CRADA, Collaborator's Assigned Employees, as defined in Article 2, shall pursue their activities on the work schedule mutually agreed upon between them, Collaborator, and NPS. Collaborator's Assigned Employees must agree to comply with Federal Government security and conduct regulations that apply to [name of collaborating unit of the National Park System] employees. Collaborator's Assigned Employees shall conform to the requirements of the Office of Government Ethics "Standards of Ethical Conduct for Employees of the Executive Branch" (5 CFR Parts 2635 and 2636) and Security Regulations, hereby made part of this CRADA, to the extent that these regulations prohibit private business activity or interest incompatible with the best interests of the U.S. Department of the Interior.

14.2.2 Collaborator's Assigned Employees shall comply with regulations that apply to [name of collaborating unit of the National Park System] employees with regard to disclosure of proprietary or procurement-sensitive information, refusal from any activities which may present a conflict of interest, including procurement or other actions in which Collaborator may have an interest. Collaborator's Assigned Employees may not represent Collaborator or work for Collaborator in competing for award from any other Federal agency during the term of the CRADA (see Article 16) or extension thereto.

14.2.3 **Collaborator's Assigned Employees** are permanently prohibited from representing or performing activities for Collaborator on any matters before NPS on which Collaborator's employees worked at [name of collaborating unit of the National Park System] while assigned to this project.

14.2.4 Collaborator's employees are prohibited from acting as Government employees, including making decisions on behalf of the Government or performing inherently Governmental functions while working at [name of collaborating unit of the National Park System].

14.3 No Warranty

Except as provided in Title 28, United States Code, Section 1498, the United States shall not be liable for the use or manufacture of any Invention made under this CRADA nor for the

infringement of any patent or copyright during the performance of this CRADA. NPS makes no express or implied warranty as to any matter whatsoever, including the conditions of the research or any **Invention** or **Product**, whether tangible or intangible, made or developed under this CRADA, or the ownership, merchantability, or fitness for a particular purpose of the research or any **Invention** or **Product**. These provisions shall survive termination of the CRADA.

14.4 Indemnification

14.4.1 Collaborator's Employees

Collaborator agrees to indemnify and hold harmless the U.S. Government for any loss, claim, damage, or liability of any kind involving an employee of Collaborator arising in connection with this CRADA, except to the extent that such loss, claim, damage or liability arises from the negligence of NPS or its employees acting within the scope of their employment. NPS shall be solely responsible for the payment of all claims for the loss of property, personal injury or death, or otherwise arising out of any negligent act or omission of its employees in connection with the performance of work under this CRADA as provided under the Federal Tort Claims Act. 28 USC § 2672.

14.4.2 Technical Developments and Products

Collaborator holds the U.S. Government harmless and indemnifies the Government for all liabilities, demands, damages, expenses, and losses arising out of the use by Collaborator, or any party acting on its behalf or under its authorization, of NPS's research and technical developments or out of any use, sale, or other disposition by Collaborator, or others acting on its behalf or with its authorization, of any **Subject Invention** or **Product** made by Collaborator using NPS's technical developments. In respect to this Article, the Government shall not be considered an assignee or licensee of Collaborator. This provision shall survive termination of this CRADA.

14.4.3 Insurance

Collaborator agrees to maintain insurance in amounts reasonably customary in the industry and to provide proof of liability insurance to NPS upon request.

14.5 Force Majeur

Neither party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such party, which causes such party to be unable to perform its obligations under this CRADA (and which it has been unable to overcome by the exercise of due diligence), including but not limited to flood, drought, earthquake, storm, fire, pestilence, lightening, and other natural catastrophes, epidemic, war, riot, civil disturbance or disobedience, strikes, labor dispute, or failure, threat of failure or sabotage of [name of collaborating unit of the National Park System] facilities, or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeur event, the party unable to perform shall promptly notify the other party. It shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as result of the force majeur event.

Article 15. Miscellaneous Terms and Conditions

Article 15 contains the miscellaneous terms and conditions relating to the parties' rights and obligations under the CRADA, and is consistent with similar provisions contained in CRADAs used by other Federal agencies. Article 15 also includes provisions relating to "successors," "severability," and "assignment" that require NPS written approval to assure ongoing compliance with the terms of the CRADA by other parties in the future.

15.1 Successors

Subject to the limitations stated in the *General Provisions*, this CRADA shall be a binding obligation to the successors and permitted assignees of all the right, title and interest of each party hereto. Any such successor or assignee of a party's interest shall expressly assume in writing the performance of all the terms and conditions of this CRADA to be performed by said party. Any such assignment shall not relieve the assignor of any of its obligations under this CRADA.

15.2 Severability

The provisions of this CRADA are severable and in the event any of provisions of this CRADA are determined to be invalid or unenforceable by a court of competent jurisdiction, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof, except that for so long as Collaborator is receiving financial benefit from the use of any **Progeny**, **Unmodified Derivatives**, **Modifications**, **Subject Invention**, or **Product** for any **Commercial Purpose** resulting from research involving **Research Specimens** acquired from [name of collaborating unit of the National Park System], Collaborator agrees to make the payments as provided in Appendix B.

15.3 Waiver

Neither party may waive or release any of its rights or interests in this CRADA except in writing. Failure by either party to assert any rights or interests arising from any breach or default of this CRADA shall not be regarded as a waiver of any existing or future rights, interests or claims.

15.4 Enforcement

Collaborator and NPS specifically acknowledge the right to pursue all legal and equitable remedies necessary to cure any breach of their obligations under this CRADA that are not satisfactorily resolved under this CRADA.

15.5 No Benefits

No member of, or delegate to the United States Congress, or resident commissioner,

shall be admitted to any share or part of this CRADA, nor to any benefit that may arise therefrom; but this provision shall not be construed to extend to this CRADA if made with a corporation for its general benefit.

15.6 Governing Law

The construction validity, performance and effect of this CRADA for all purposes shall be governed by applicable Federal laws.

15.7 Entire Agreement

This CRADA, consisting of the Statement of Work, Appendix A (research specimen collection permit(s) issued by NPS to Collaborator), and Appendix B, constitutes the entire agreement between the parties concerning the subject matter hereto and supersedes any prior understanding or written or oral agreement relative to said matter.

15.8 Headings

Titles and headings of the Sections and Subsections of this CRADA are for the convenience of references only and do not form a part of this CRADA and shall in no way affect the interpretation thereof.

15.9 Amendments

If either party desires a modification in this CRADA, the parties shall, upon reasonable notice of the proposed modification by the party desiring the change, confer in good faith to determine the desirability of such modification. Such modification shall not be effective until a written amendment is signed by all parties hereto by their representatives duly authorized to execute such amendment.

15.10 Assignment

Neither this CRADA nor any rights or obligations of any party hereunder shall be assigned or otherwise transferred by either party without the prior written consent of the other party, except that Collaborator may assign, subject to the provisions of paragraph 15.1, this CRADA to the successors or assignees of a substantial portion of Collaborator's business interests to which this CRADA directly pertains.

15.11 Notices

All notices pertaining to or required by this CRADA shall be in writing and shall be directed to the signatory(s).

15.12 Independent Contractors

The relationship of the parties to this CRADA is that of independent contractors and not as agents of each other or as joint venturers or partners. NPS shall maintain sole and exclusive control over its personnel and operations.

15.13 Use of Name or Endorsements

15.13.1 Collaborator shall not use the name of [name of collaborating unit of the National Park System], NPS or the Department of the Interior on any Progeny, Unmodified Derivatives, Modifications, Subject Invention, or Product or service which is directly or indirectly related to either this CRADA or any patent license or assignment agreement which implements this CRADA without the prior approval of [name of collaborating unit of the National Park System]. Collaborator shall not publicize, or otherwise circulate, promotional material (such as advertisements, sales brochures, press releases, speeches, still or motion pictures or video, articles, manuscripts or other publications) which states or implies Governmental, Departmental, Bureau, or U.S. Government employee endorsement of any Progeny, Unmodified Derivatives, Modifications, Subject Invention, or Product, service or position which Collaborator represents. No release of information relating to this CRADA may state or imply that the Government approves of Collaborator's work product, or considers Collaborator's work product to be superior to other products or services.

15.13.2 Collaborator must obtain prior U.S. Government approval from NPS for any public information releases which refer to the Department of the Interior, any bureau or employee (by name or title), or this CRADA. The specific text, layout, photographs, etc. of the proposed release must be submitted with the request for approval.

15.13.3 By entering into this CRADA, NPS does not directly or indirectly endorse any product or service provided or to be provided by Collaborator, its successors, assignees, or licensees.

15.14 The operations of Collaborator will be conducted in all material respects in accordance with all applicable laws, ratified treaties, international agreements and conventions, regulations, guidelines and other requirements of all governmental bodies having jurisdiction over Collaborator. Collaborator shall have all material licenses (including a radioactivity license), permits, orders or approvals from governmental bodies required for the conduct of its business. All such licenses, permits, approvals or other requirements shall be in full force and there shall exist no violations or breaches of any such domestic licenses, permits, approvals or other requirements. Collaborator shall be in compliance in all material respects with all limitations, restrictions, conditions, standards, prohibitions, requirements, obligations, schedules and timetables contained in any applicable law or in any plan, order, decree, judgment, notice or demand letter issued, entered, promulgated or approved thereunder.

Article 16. Duration of Agreement and Effective Date

Article 16 provides that the CRADA will remain in effect for a term of five (5) years, unless terminated earlier pursuant to Article 12. Five years is believed to be a reasonable term for the conduct of important joint scientific research projects governed by the CRADA. The

CRADA can be renewed with the consent of the parties pursuant to the "amendment" provisions of paragraph 15.9.

16.1 Effective Date

This CRADA shall enter into force as of the date of the last signature of the parties as shown on the signature page, and will terminate five (5) years from the effective date. In no case will this CRADA extend beyond the ending date specified herein, unless it is revised in accordance with paragraph 15.9 of this CRADA.

16.2 Review Period

Notwithstanding paragraph 16.1 above, the NPS Director shall have the opportunity to disapprove or require the modification of this CRADA for a 30-day period beginning on the date the agreement is presented to the Director by the Superintendent of [name of collaborating unit of the National Park System], unless the agreement is signed by the Director.

SIGNATURES BEGIN ON NEXT PAGE

Signature Page

SIGNATURES

In Witness Whereof, the parties have executed this CRADA on the dates set forth below. This CRADA may be signed in counterparts, each of which will be deemed to be an original. All such counterparts shall together constitute a single, executed instrument when all parties have so signed. Any communication or notice to be given shall be forwarded to the respective addresses listed below.

FOR NPS:		
[name]		Date
Director		
National Park Service		
FOR [name of collaborating un	it of the National Park System]:	
[name]		Date
Superintendent		
[name of collaborating unit of t	he National Park System]	
Mailing Address for Notices:	Office of the Superintendent [name and address]	
FOR COLLABORATOR:		
[signatory's name] [title]		
[name of collaborator (if differ	rent from signatory)]	
Mailing Address for Notices:		
	[name and address]	

Statement of Work

Collaborator and the collaborating unit of the National Park System should work together to draft the Statement of Work that describes the CRADA effort and anticipated results. Each Statement of Work will describe the specific research activities to be undertaken by Collaborator with a collaborating unit of the National Park System. Whereas the CRADA General Provisions apply to all benefits-sharing CRADAs Service-wide, Statements of Work describe the specific facts and circumstances relating to specific CRADA research activities. Nonetheless, all activities described in a Statement of Work are subject to the controlling provisions of the CRADA General Provisions.

The Statement of Work should be a concise, technical document containing the kinds of information found in typical research proposals. It should consist of the following subsections:

Background - The history of the opportunity or problem; the scientific purpose, need, or potentially useful application of the idea or research activity; earlier attempts to solve the problem or address the need; projections of potential applications if successful.

Objective - The anticipated result(s) of current and planned research and development activities, including identification of the anticipated uses of possible discoveries.

Tasks - Each task or step necessary to reach the stated objective should be described in detail. This should include a list of the relative responsibilities of Collaborator as well as the collaborating unit of the National Park System.

Expected Results - Implications of the project; short-term generations of additional projects or research activities (if any); foreseeable longer-term applications of anticipated research results; estimates or related market data of expected economic value of discoveries or inventions resulting from the research activities (if known).

Constraints - Uncertainties in the future or estimates associated with the research project; assumptions about future events and the availability of resources, personnel, or equipment; questions of technical feasibility; deadlines, windows of opportunity, or other constraints.

Resources - A detailed list of all resources being supplied to the research project pursuant to the CRADA by the partners including financial contributions and an estimate of in-kind expenses and contributions.

Once approved, the Statement of Work becomes a key part of the completed CRADA.

CRADA APPENDIX A

[COPY OF COLLABORATOR'S NPS SCIENTIFIC RESEARCH AND COLLECTING PERMIT(S)]

CRADA APPENDIX B

[BENEFITS-SHARING TERMS]

THIS PAGE INTENTIONALLY LEFT BLANK