National Institutes of Health
Technology Transfer

CRADA OVERVIEW AND GUIDE

The Cooperative Research and Development Agreement (CRADA) was established in 1986, codified under US Statute (15 U.S. Code § 3710a), and serves as the collaborative agreement mechanism by which an Institute of the National Institutes of Health (NIH) is able to: 1. Grant a Collaborator an exclusive license option for any Government intellectual property that may result, and 2. Obtain funds from the Collaborator to support the research performed under the collaboration. There are multiple CRADA templates that capture the various forms of collaborations, but each template provides the same grant of rights to a Collaborator and reserved rights for the Government.

There are three NIH CRADA models commonly used by the National Cancer Institute (NCI) Technology Transfer Center (TTC) to facilitate a collaboration between an NIH Institute laboratory and an outside party:

1. The **Standard CRADA** is used to facilitate and formalize a collaborative study of basic research between an NIH laboratory and an outside party. This model captures scenarios where experiments are being performed in both NIH and Collaborator facilities and where proprietary technology from one or both NIH and Collaborator is being utilized. Accordingly, the Standard CRADA template includes terms concerning ownership of materials and data, intellectual property matters, as well as publication of results.
2. The **Intramural Clinical CRADA** is used for collaborative studies which include a clinical trial conducted at the NIH. Accordingly, the Intramural Clinical CRADA includes terms for performance of the clinical trial such as safety reporting, regulatory filing, protection of human subjects, and provision of an investigational agent or device.
3. The **Materials CRADA** is used for the transfer of proprietary technology and related information into the NIH when there will be no significant collaboration between the parties on the research project. This scenario is analogous to a Material Transfer Agreement wherein there is a one-off transfer of research material from Collaborator to NIH.

Characteristics Common to All CRADA Models

The Research Plan
Each of the CRADA templates includes a Research Plan, which details the scientific background, project goals, material contributions of the parties, experimental details, and role(s) of the parties. Importantly, the Research Plan must detail any experiments leading to potential intellectual property for which a license option would be available.

Funding to Support the Conduct of the Research Plan
The CRADA templates also capture the specifics of any funding that will be provided by the Collaborator to support the Research Plan. This section may include a budget and payment schedule.

Confidentiality
If a party provides the other party with Confidential Information to support the Research Plan, then the standard term of confidentiality is three (3) years from the date of expiration or termination of the CRADA. Further, the data generated under the Research Plan of the CRADA ("CRADA Data") will be maintained in confidence until published or a corresponding patent application is filed, which is subject to the Collaborator's review (as discussed below).

Liability
The NIH can only accept liability for its actions under the CRADA and has no authorization to indemnify the CRADA Collaborator or any third party.

Assignment
Assignment of the Agreement is addressed explicitly in the CRADA. In accordance with the Anti-Assignment Act (41 USC section 15), no technology transfer agreement may be assigned or otherwise transferred without the Government's prior written consent. The only exception to this required consent for assignment is that the Collaborator may assign the CRADA to its Affiliates (as defined in the CRADA).

Unilateral Termination
Either NIH or the Collaborator may unilaterally terminate the CRADA at any time by providing written notice at least sixty (60) days before the desired termination date. Additional language regarding immediate termination can be added if a party materially breaches the Agreement and fails to cure such breach within thirty (30) days after written notice. Language regarding immediate termination can also be added if it is necessary to end the project to protect the health or welfare of patients in any clinical trial conducted under the CRADA.

Publication
A fundamental mission of NIH is public dissemination of research results to benefit public health. Accordingly, the CRADA ensures that NIH preserves the right to publish the work performed under the CRADA. The CRADA details that either party will provide a proposed disclosure to the other party for review to permit identification of that party's Confidential Information. The parties may agree to delay

a publication to file a patent application on any new inventions described in the disclosure. The typical review period is thirty (30) days with an additional thirty (30) day delay for patent filing purposes.

Collaborator's Rights to the Outcome of the CRADA Research Plan

The CRADA grants to the Collaborator an exclusive option to elect an exclusive or non-exclusive commercial license to the Government's rights in inventions that arise from the CRADA Research Plan. In addition, the CRADA Collaborator is provided rights to the data and/or materials that are generated under the CRADA. NIH, however, will not contemplate assignment of NIH-generated intellectual property, data, or material rights to the CRADA Collaborator or to any third party.

Licensing of CRADA Subject Inventions
For patentable or otherwise protectable inventions conceived or first actually reduced to practice under a CRADA (a "CRADA Subject Invention" 15 USC 3703 (10)), the Collaborator is granted an exclusive option to elect an exclusive or non-exclusive commercial license to the Government's rights in inventions that arise from the CRADA Research Plan. The license will be in the form of a model NIH license, and the field of use for the license is derived from the scope of the Research Plan. Timelines for exercise of a license option by the Collaborator and negotiation of the subsequent license are detailed in the CRADA. There are several sections regarding reserved rights of the Government to CRADA Subject Inventions that are codified by statute (15 U.S.C. § 3710a) and are non-negotiable.

Access and Use of Data and Materials Generated under the CRADA
Aside from inventions, data and/or materials may also be generated under a CRADA. "CRADA Data" are the data/results generated under the Research Plan, and "CRADA Materials" are the tangible materials that are generated in the conduct of the Research Plan. The Collaborator is granted certain rights to CRADA Data and CRADA Materials, while NIH also maintains reserved rights. Generally, the party that generates the CRADA Data/CRADA Materials retains ownership. The parties agree to exchange all CRADA Data and CRADA Materials and typically reserve the right to:

1. Use the CRADA Data/CRADA Materials for their own internal, lawful purposes (including but not limited to regulatory and patent filings), and
2. Distribute the CRADA Data/CRADA Materials to third parties, subject to first publishing the results of the CRADA research and any other limitations agreed to by the parties for a particular project.

Clinical CRADA

A CRADA that contemplates a clinical protocol is documented with the Clinical CRADA template to capture specifics related to the conduct of the clinical trial including:

1. IND filing: Either party may hold the IND for the protocol and relevant obligations for each party in the filing of regulatory documents for the protocol are included.
2. Adverse event reporting to the FDA and Collaborator.

3. Language relevant to NIH's status as an Association for the Accreditation of Human Research Protections Programs (AAHRPP)-accredited institution. As part of its AAHRPP accreditation, NIH must ensure that Collaborator informs NIH of information that could directly affect the health or safety of past or current Human Subjects treated at NIH or that could influence the conduct of a protocol conducted at NIH.
4. Reference to, but not incorporation of the protocol into the CRADA. NIH avoids incorporation of the protocol into the CRADA so that amendments to the protocol, which occur frequently, can be accomplished without also amending the CRADA.

Final Considerations

CRADAs are executed by a designee of the NIH Institute collaborating on the research project, but prior to execution, these agreements are reviewed within NCI TTC, by the Institute's Ethics office, by the Institute's leadership, and by an NIH-wide CRADA subcommittee. As such, all modifications to the CRADA must be justified. It is expected that CRADA negotiations last no longer than six (6) months once the parties concur on their overall goals and have agreed to use the CRADA mechanism, so consistent communication during the negotiation process is expected.