



OAK RIDGE NATIONAL LABORATORY

Managed by UT-Battelle for the Department of Energy



The Cooperative Research and Development Agreement

A Cooperative Research and Development Agreement (CRADA) is a mechanism whereby non-federal entities (industry, universities, non-profits, etc.) can collaborate with federal laboratories on research and development projects. CRADAs are specifically technology transfer agreements; technologies developed under CRADAs are expected to be transferred to the private sector for



commercial exploitation, either by the non-federal partner or another licensee of such technologies. CRADAs were authorized by the Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96-480); the authority for government-owned, contractor-operated laboratories such as ORNL to enter into CRADAs was granted by the National Competitiveness Technology Transfer Act of 1989 (Public Law 101-189). CRADAs provide a very flexible way for companies, universities, non-profits, and other non-federal entities to access the unique technologies, facilities, and expertise available at ORNL on a collaborative basis. The Participant is given certain access to rights in Laboratory-developed technologies in return for productive collaborative participation in the development of such new technologies.

Characteristics of CRADAs

- Will only be used where the work to be performed (as described in the statement of work) is done collaboratively by Laboratory employees and Participant employees.



- Work often focuses on maturation of a technology portfolio (typically one or more patents) that the laboratory has developed that requires further development to achieve commercialization.
- Projects must be approved by DOE and must support DOE missions.
- Each party owns its own inventions; Participant is granted a first option to license Laboratory-owned inventions created under the CRADA. Generated Information that is not patentable can be kept confidential as Protected CRADA Information for up to 5 years.
- Funding mechanisms are flexible. Participant's in-kind work contribution is always funded by the Participant. Laboratory's efforts may be funded by government funds or funds-in from the Participant or a combination of the two. No funds may flow from the Laboratory to a Participant under a CRADA.

How Does My Company Engage the Laboratory for a Collaborative Partnership?

Companies, universities, non-profits, and other entities wishing to collaborate in development of new technologies with research staff at ORNL should be aware of the steps detailed below that are necessary to enter into a CRADA relationship with ORNL:

1. Learn about areas of new technology development in which ORNL is engaged, and seek to develop a relationship with key investigators at ORNL to learn more about these technologies. If a connection is made, the non-federal entity's technical representative and the principal investigator identified at the Laboratory for this project should develop a statement of work that accurately and completely describes the work to be performed, lays out a task plan in logical fashion, and includes timelines and associated budgets for each task or sub-task to be performed as part of the research project. This statement of work should clearly show the collaboration and the contributions of each party to the research and development project.
2. Contact one of the ORNL Sponsored Research Managers listed below to request a briefing on the structure of CRADAs and the processes required to execute a CRADA.



3. Once a statement of work is finalized, the Laboratory principal investigator will submit the project for approval (there are both Laboratory-level and DOE approvals required for such projects).
4. Once the necessary project approvals are received, a Sponsored Research Manager in the Laboratory's Office of Technology Transfer will put together a draft CRADA, incorporating the statement of work, as well as project-specific and Participant-specific details provided by the principal investigator.
5. This draft agreement will be provided to the Participant for review and approval. If approved by the Participant, the Sponsored Research Manager will provide the Participant executable copies of the agreement for signature by both parties.
6. A final approval by DOE is required before the CRADA can be finalized. Upon DOE approval the Sponsored Research Manager will provide the Participant with an advance payment invoice if the Laboratory is to receive funds under the CRADA from the Participant. Receipt of the any required advance payment by the Laboratory is necessary before any work can begin on the project.
7. Once funds are received and an ORNL account is set up to collect costs for the project, or if no funds are to be received from the Participant under the CRADA, the Principal Investigator can commence work on the project (assuming government funds are in place to cover the costs of the Laboratory's work on the CRADA).

Advantages of CRADAs for the Participant

- Participant gets the opportunity to participate in commercialization of exciting new technologies emanating from ORNL.
- Expertise of interdisciplinary teams of scientists and engineers available on as-needed basis without having to expand Participant's employee rolls.
- Provides Participant access to facilities and expertise not available in the private sector.
- Participant's funds devoted to maturation of the subject technology of the CRADA may be leveraged by government funds supporting Laboratory efforts, if government funds are available.



- Participant is granted a first option to exclusively license any CRADA-generated inventions made by Laboratory research staff.
- CRADA-generated information that is not patentable may be kept confidential as Protected CRADA Information for up to 5 years (competitive technology advantage for the Participant).

Key ORNL Contacts for the Participant

Technical Contacts:

Participants should engage ORNL scientists and engineers performing research in their areas of interest to begin partnership discussions around a potential CRADA statement of work. Information on the research organizations at ORNL, and the various types of work in which they are doing research is available on the ORNL web page <https://www.ornl.gov/content/science-and-discovery> Information on new technologies being developed at ORNL is available at <https://www.ornl.gov/partnerships/technology-licensing/available-technologies>.

Agreement Contacts:

Potential Sponsors wishing to discuss the specifics of CRADAs should contact one of the following:

- **Jennifer Carpenter**; Telephone 865.574-6605, Email carpenterjl@ornl.gov
- **Matthew Garrett**; Telephone 865.576-2967, Email garrettmw@ornl.gov
- **Mark Reeves**; Telephone 865.576.2577, Email reevesme@ornl.gov