UC Davis Export Controls:
Frequently Asked Questions

1. **What is an export?**

In addition to actual shipment of a commodity out of the country, the export regulations also control the transfer, release or disclosure to foreign persons in the United States of technical data about controlled commodities. The "deemed export" regulation states that a transfer of "technology" or "technical data" to the foreign person is "deemed" to be an export to the home country of the foreign person. Accordingly, for all controlled commodities, a license or license exception is required prior to the transfer of "technology" or "technical data" about the controlled commodity to foreign persons inside the U.S.

2. **What is "technology" or "technical data"?**

These phrases refer to technical information beyond general and basic marketing materials about a controlled commodity. They do not refer to the controlled equipment/commodity itself, or to the type of information contained in publicly available user manuals. Rather, the terms "technology" and "technical data" mean specific information necessary for the development, production, or use of a commodity, and usually takes the form of blueprints, drawings, photographs, plans, diagrams, models, formulae, tables, engineering specifications, and documentation. The "deemed export" rules apply to transfer of such technical information to foreign nationals inside the U.S.

3. **What is information resulting from "fundamental research"?**

The export control regulations exempt from licensing requirements technical information (but not controlled items) resulting from "fundamental research." Fundamental research is defined as basic and applied research in science and engineering conducted at an accredited U.S. institution of higher education where the resulting information is ordinarily published and shared broadly within the scientific community. Such research can be distinguished from proprietary research the results of which ordinarily are restricted for proprietary reasons or specific national security reasons. Research conducted by scientists, engineers, or students at a university normally will be considered fundamental research. The fundamental research exclusion permits U.S. universities to allow foreign members of their communities (e.g., students, faculty, and visitors) to participate in research projects involving export-controlled technical information on campus in the U.S. without a deemed export.
Further, technical information resulting from fundamental research may be shared with foreign colleagues abroad and shipped out of the United States without securing a license.

Prepublication review by a sponsor of university research solely to ensure that the publication does not compromise patent rights or inadvertently divulge proprietary information that the sponsor has furnished to the researchers does not change the status of the research as fundamental research, so long as the review causes no more than a temporary delay in publication of the research results. However, if the sponsor will consider as part of its prepublication review whether it wants to hold the research results as trade secrets (even if the voluntary cooperation of the researcher would be needed for the company to do so), then the research would no longer qualify as "fundamental." As used in the export regulations, it is the actual and intended openness of research results that primarily determines whether the research counts as "fundamental" and not subject to the export regulations. University based research is not considered "fundamental research" if the university or its researchers accept (at the request, for example of an industrial sponsor) restrictions on publication of scientific and technical information resulting from the project.

4. **What is "published" information?**

Information is "published" (and therefore not subject to export controls) when it becomes generally accessible to the interested public in any form, including: (1) publication in periodicals, books, print, electronic, or other media available for general distribution (including websites that provide free uncontrolled access) or to a community of persons interested in the subject matter, such as those in a scientific or engineering discipline, either free or at a price that does not exceed the cost of reproduction and distribution; (2) readily available at libraries open to the public or at university libraries; (3) patents and published patent applications available at any patent office; and (4) release at an open conference, meeting, seminar, trade show, or other open gathering held in the U.S. (under ITAR) or anywhere (under EAR). Note, a conference or gathering is "open" if all technically qualified members of the public are eligible to attend and attendees are permitted to take notes or otherwise make a personal record of the proceedings and presentations. A conference is considered open notwithstanding a registration fee reasonably related to cost, and there may be a limit on actual attendance as long as the selection is either 'first come' or selection based on relevant scientific or technical competence.

5. **What is "educational" information?**

Whether in the U.S. or abroad, the educational exclusions in EAR and ITAR cover instruction in science, math, and engineering taught in courses listed in catalogues and associated teaching laboratories of academic institutions, even if the information concerns controlled commodities or items.

6. **What is the fundamental research exemption?**

The fundamental research exemption is derived from the U.S. National Security Directive 189 (1985) which states: “It is the policy of this Administration that, to the maximum extent possible, the products of fundamental research remain unrestricted. It is also the policy of this Administration that, where the national security requires control, the mechanism for control of information generated during federally funded fundamental research in science, technology and engineering at colleges, universities and laboratories is classification. Each federal government agency is responsible for: a) determining whether classification is appropriate prior to the award of a research grant, contract, or cooperative agreement and, if so, controlling the research results through standard classification procedures; b) periodically reviewing all research grants, contracts or cooperative agreements for potential classification. **No restriction may be placed upon the conduct or reporting of federally funded fundamental research that has not received national security classification, except as provided in applicable U.S. statutes.**” See FAQ #3 for further information regarding the application of this exemption.

7. **What kinds of controls in a government-sponsored research project would compromise the fundamental research exemption?**

If the U.S. Government funds research and specific controls are agreed on to protect information resulting from
the research, then information resulting from the project will not be considered fundamental research. Examples of "specific controls" include requirements for prepublication review by the Government, with right to withhold permission for publication; restrictions on prepublication dissemination of information to non-U.S. citizens or other categories of persons; or restrictions on participation of non-U.S. citizens or other categories of persons in the research.

8. **What are deemed exports?**

In addition to actual shipment of a commodity out of the country, the export regulations also control the transfer, release or disclosure to foreign persons in the United States of technical data about controlled commodities. The “deemed export” regulation states that a transfer of “technology” or “technical data” to the foreign person is “deemed” to be an export to the home country of the foreign person. Accordingly, for all controlled commodities, a license or license exception (such as the fundamental research exemption) is required prior to the transfer of “technology” or “technical data” about the controlled commodity to foreign persons inside the U.S.

9. **What is not subject to the deemed export regulations?**

Technical data that is "in the public domain" under ITAR or "publicly available" under EAR, including "fundamental research", is not subject to deemed export controls. Accordingly, the compliance plan at the University of California is based largely upon insuring that research results generated at the University meet the standards for "publicly available" thereby avoiding the necessity of securing a license prior to dissemination of information to foreign nationals involved in the research, including graduate students, post doctoral scholars, and visiting scientists. For University-based research, there are three different ways that the technical information may qualify for an exemption from the deemed export regulations. It is exempt if it:

- Is published or disseminated
- Arises during, or results from, fundamental research or
- Is educational information (as described at 15CFR734.9 and 22CFR120.10(a)(5)) released by instruction in catalog courses or associated teaching laboratories of academic institutions.

10. **Is a "deemed" export license required in order for foreign nationals to "use" controlled equipment in research projects, classes and teaching labs on campus?**

No, actual use of equipment by a foreign national in the U.S. is not controlled by the export regulations. Indeed, inside the United States, any person (including foreign nationals) may purchase export-controlled commodities and the "deemed" export rule only applies to technical information about the controlled commodity. As such, while the use of equipment inside the U.S. is not controlled, the transfer of technical information relating to the use (i.e., operation, installation, maintenance, repair, overhaul and refurbishing) of equipment may be controlled in certain circumstances. For example, if the manufacturer of the equipment provided the University some confidential, proprietary information about the design or manufacture of the equipment, then the University might need a "deemed" export license to provide such proprietary information to a foreign national, especially if shipment of the item to the home country of the foreign national would require an export license. In sum, the export regulations allow foreign students, researchers and visitors to use (and receive information about how to use) controlled equipment while conducting fundamental research on U.S. university campuses or while studying at the institution, as long as the technical information about the controlled equipment qualifies as "in the public domain" or "publicly available."

11. **What must be done to ship a controlled item or commodity out of the country?**

The Commerce Department has export jurisdiction over all goods and all "technology" in the United States, unless some other agency has expressly been given such authority. However, this does not mean that a license must always be obtained before any item or piece of information can be shipped.
To determine whether it is necessary to obtain an export license from the relevant Federal agency to send tangible items outside the United States, the researcher preparing the shipment needs to consider:

- the description of the item,
- its intended end-use and end-user, and
- its destination.

If the item is controlled, a license to ship the item outside the United States is required even when the item or equipment is used in or results from fundamental research. For commodities controlled under EAR, whether a license is required depends upon the country to which the item is being shipped. Even in cases where license approval from the Department of Commerce is not required to ship the item, there are administrative requirements and records that must be maintained regarding shipments of EAR controlled items out of the United States. The Office of Research can assist you in determining whether a specific license is required, will secure a license when needed, and can advise you on what records need to be maintained in cases where the item can be shipped without a license. For assistance, please contact the Research Compliance and Integrity unit.

If a commodity is controlled under ITAR, then a license is always required before it can be shipped to any country outside the United States, except in limited circumstances such as shipment to a military base overseas. The University of California, Office of the President, handles such licenses.

12. What must UC researchers do to adhere to UC's export compliance plan?

UC faculty and staff must take the following steps to assure that they do not violate the export regulations and become personally liable for substantial civil and criminal penalties:

- Prior to shipment of any commodity out of the U.S., determine if the commodity requires an export license and assist in securing such license, when required.
- Secure license approval or verify license exception PRIOR to shipment for all controlled items. Contact the Office of Research for guidance on verifying license exceptions and submission of license applications.
- Assure that all technical data about export-controlled commodities qualify as "publicly available" under the above-described criteria (e.g., publish early and often).
- Do not accept publication controls or access/dissemination restrictions (such as approval requirements for use of foreign nationals), enter into 'secrecy agreements', or otherwise agree to withhold results in research projects conducted at UC or that involve UC facilities, students, or staff.
- Do not accept proprietary information from another that is marked "Export Controlled." Return to the manufacturer any materials they provide to you about export-controlled equipment that is marked "Confidential." Review any Confidentiality/Non-Disclosure Agreements to insure that UC and you are not assuming the burden of restricting dissemination based on citizenship status or securing export licenses.
- Do not attend meetings that foreign nationals are prohibited from attending. Do not sign the DD2345, Militarily Critical Technical Data Agreement, as a condition of attending a conference or receiving materials from the government.
- Do not travel to conduct research or educational activities to embargoed countries without first checking with the Office of Research to ascertain whether a license from the Department of Treasury, Office of Foreign Assets Control, is required. The list of currently embargoed countries can be found at the Treasury Department's Office of Foreign Assets Control (OFAC) website.

13. What are the penalties for violating the export control regulations?

Violations of the export control regulations can result in both civil and criminal penalties for the individual and for the institution. In addition to a civil penalty not to exceed $10,000 for each violation of the export...
regulations, there are criminal penalties that may be imposed, including a fine of up to $1 million against The Regents of UC, and a fine of up to $250,000, or imprisonment of not more than 10 years, or both against the individual. Penalties apply to each individual violation, which means that if a violation relates to more than one controlled material or item or occurs on more than one occasion, each item or incident may trigger a penalty. Contact the Research Compliance and Integrity unit immediately if you think you have made a mistake and violated export controls; we can help assess how best to remedy the situation.