MEMORANDUM

TO:        All Faculty and Administrators
FROM:      Perry Molinoff, Vice Provost for Research
           Wendy White, Senior Vice President and General Counsel
SUBJECT:   A Reminder to Researchers and Administrators Regarding Federal Export
           Control Laws

Although federal laws restricting exports of goods and technology have existed since the 1940s, the federal government has begun placing more emphasis on enforcement generally, and in particular, at universities. For example, in the fall of 2003, the Inspectors General for the Departments of Commerce, Defense, Energy, and State conducted visits to nine major academic research institutions specifically to examine compliance with export control laws. The Inspectors General found a general lack of "awareness and understanding," as well as specific violations, at the research universities, and based partly on those assessments, have issued a report to Congress recommending amendments to the laws and stricter interpretations of existing language.

The vast majority of teaching and research activity at Penn comes within one or more of several exclusions. However, researchers and administrators should understand how the laws (and the exclusions) may apply to their activities, their compliance obligations, and how the Office of Research Services and Office of the General Counsel can assist you.

Three different federal departments enforce the export control laws: the Department of Commerce, through its Export Administration Regulations ("EAR"); the Department of State, through its International Traffic in Arms Regulations ("ITAR"); and the Department of Treasury, through its Office of Foreign Assets Control ("OFAC").

Broadly speaking, the EAR are intended to limit the export and deemed export of "dual use" items and information. "Dual use" means, generally, items and information the government has designated as having legitimate commercial purposes, but that also can have potential military applications when received or obtained by particular individuals, or for particular purposes, or within particular countries (e.g., certain computers, software, chemicals and biologics). The ITAR govern items and information that are inherently military in nature, according to the government (e.g. encryption technology). OFAC enforces economic and trade sanctions against countries that are "embargoed" and individuals on "specially designated nationals" lists (generally, individuals and organizations the government has listed as terrorists, international narcotics traffickers, or involved in or supportive of activities advancing the proliferation of weapons of mass destruction).

In general, export control regulations apply to:

- the transfer, or "export" of specified items or information to people or entities outside the United States;
- the disclosure of certain information to certain foreign nationals inside the United States (often called a "deemed export");
- the training or offering of services involving controlled equipment or information to foreign nationals; and
- transactions with, or providing services to, certain foreign countries or individuals who are on embargo lists.

If an activity does not come within an exception or exclusion, you may need to obtain a license from the government. Obtaining a license can take anywhere between six weeks and more than twelve
months, depending on the particular facts. Sanctions for noncompliance can include civil and criminal penalties (including fines and/or prison sentences for individuals) and administrative penalties (loss of research funding).

While the regulations are broad and apply to virtually all fields of research and teaching, sponsored or not, the vast majority of research and teaching activities at Penn do not require a license. There are several significant exclusions to the licensing requirements, including:

- **the “fundamental research” exclusion.** Generally, an export license is not needed to conduct basic and applied research in science and engineering at Penn (including work with foreign nationals), provided that there are no restrictions on access by students or others to, or publication of, the research results; the research is carried out openly; and the results are intended to be, and ordinarily are, published or shared broadly within the scientific community.

- **the “public domain” exclusion.** Generally, an export license is not necessary before sharing technical data or information with a foreign national inside the U.S. as part of a class you are teaching, laboratory, or conference or seminar, if the same technical data or information has already been published widely, or is available in libraries or through newsstands, bookstores, subscriptions or free web sites, or is disclosed in published patent applications.

- **the “teaching” exclusions.** In general, ITAR exempts information (but not technology and materials) which is “general scientific, mathematical or engineering principles commonly taught in . . . universities.” A closely-related EAR exclusion concerns “educational information” released by instruction in catalog courses and associated teaching laboratories. So, in general, no license is needed to share information as part of a course you are teaching. You also may train most foreign nationals how to use most otherwise-controlled pieces of scientific equipment as part of that class or lab instruction. However, this “teaching exclusion” does not apply to non-public domain information and certain information deemed classified or sensitive by the federal government.

Most items and information a university researcher wants to physically export outside the U.S. will not have a “dual use” and will fall under a broad exception to the EAR licensing requirement. However, if the item or information comes within one or more of the following broad categories, you may want to consult with the Office of Research Services for assistance determining if a license might be necessary: nuclear materials, information and equipment; chemicals, microorganisms or toxins; materials processing; electronics; computers; telecommunications and information security; lasers and sensors; navigation and avionics; marine items; and propulsion systems, space vehicles and related equipment.

In addition, you generally do not need a license to travel to, conduct research in, spend money in, and take equipment to, most foreign countries as part of your teaching and/or research duties. However, OFAC restrictions apply to a limited number of “embargoed entities” and “specially designated nationals”, which should be checked as part of planning your activities with people or groups outside the U.S. At the present time, OFAC restrictions apply to certain activities in the Balkans; Burma; Cuba; Iran; Iraq; Liberia; Libya; North Korea; Sudan; Syria; and Zimbabwe. (You can check for updates to the “embargoes entities”, and the specific limitations for each country, at [http://www.ustreas.gov/offices/eotf/fc/ofac/sanctions/index.html](http://www.ustreas.gov/offices/eotf/fc/ofac/sanctions/index.html)

You can scan the “specially designated nationals” lists at [http://www.ustreas.gov/offices/eotf/fc/ofac/sdn/index.html](http://www.ustreas.gov/offices/eotf/fc/ofac/sdn/index.html)

At Penn, the Office for Research Services is responsible for helping the community understand and comply with export control laws, which can be very complicated and detailed. At the end of this memo, we have attached a summary of some of the key definitions from the regulations, and some World Wide Web links, that you can use as a guide to better understand the breadth and complexity of the regulations. Because determining whether a certain item or project implicates the export control
regulations is very fact-specific, by necessity this short reminder memo is general. The ORS web site, at http://www.upenn.edu/researchservices/exportcontrols.html, has more detailed information on the issues summarized in this memo as well as links to helpful external materials, and we encourage you to familiarize yourself with the site. If you have a question regarding your activities, you can review this web site, or contact Donald Deyo, Ph.D., J.D., in the Office of Research Services. If you think you may need a license for any research or other activity you may be considering, please contact Dr. Deyo also. ORS will work with the Office of the General Counsel, where necessary, to assist you.
SUMMARY OF KEY TERMS AND HELPFUL LINKS


“Export”, as used in the regulations, does not have the common dictionary definition, and has an expansive meaning. Instead, “export” generally means: (1) actual shipment of covered goods or information outside the U.S.; (2) the electronic or digital transmission of covered goods or information outside the U.S.; and (3) release or disclosure, including verbal disclosures or visual inspections, of any covered technology, software or technical data to any foreign national, whether in the U.S. or abroad. This is a summary of a complicated definition, which is set forth at 15 CFR 734.2, and can be found at http://w3.access.gpo.gov/bis/ear/pdf/734.pdf.

“Technical data” means “information of any kind that can be used, or adapted for use, in the design, production, manufacture, utilization, or reconstruction of articles or materials. The data may take a tangible form, such as a model, prototype, blueprint, or an operating manual; or they may take an intangible form such as technical services.” You can review the definition at http://w3.access.gpo.gov/bis/ear/pdf/772.pdf.

“Dual use” means goods and technology that are not inherently military in nature, and are primarily and inherently commercial or potentially commercial in nature, but that the government has decided may have a “dual use” for a military purpose, when received or obtained by particular individuals, or for particular purposes, or within particular countries. “Dual use” is a concept underlying the government’s rationale for what items and information, and what individuals and uses, may require a license; however, there are some “purely commercial” items and information that require a license under the EAR.

“Fundamental research” means information (including non-encrypted software code) resulting from basic and applied research in science and engineering conducted at [the University of Pennsylvania] that is ordinarily published and shared broadly within the scientific community and that is not restricted for proprietary reasons or specific national security reasons. See 15 CFR 734.8, at http://w3.access.gpo.gov/bis/ear/pdf/734.pdf.

The EAR have an overview of questions to ask and steps to take to determine if a license is necessary, which can be found at http://w3.access.gpo.gov/bis/ear/pdf/732.pdf. However, this is a very long and complicated list, so contact ORS if you need assistance.

OFAC administers and enforces economic and trade sanctions against countries on OFAC’s list of “embargoed entities” and individuals on its “specially designated nationals” lists. In general, there are very significant restrictions on providing services in, or spending money in, the “embargoed entities”. Currently, the following countries are on that list: Balkans; Burma; Cuba; Iran; Iraq; Liberia; Libya; North Korea; Sudan; Syria; Zimbabwe. You can check for updates to the “embargoes entities”, and the specific limitations for each country, at http://www.ustreas.gov/offices/eotffc/ofac/sanctions/index.html. You can scan the “specially designated nationals” lists at http://www.ustreas.gov/offices/eotffc/ofac/sdn/index.html.

There is a separate list of “embargoed countries” under the EAR, which can be found at http://w3.access.gpo.gov/bis/ear/pdf/746.pdf. Currently, the EAR embargoed countries are: Cuba, Iran, Iraq, and Rwanda.

Importantly, these are not the only countries for which a license to ship physical items or transfer information or technical data might be necessary.