
Complying with U.S. Export Control Regulations: a University Perspective

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Students: 24,725 (10,324 undergraduate, 11,092 graduate ft)

Faculty: 4,318 (2,545 standing and 1,773 associated)

Post-Doctoral Fellows : ~1,100

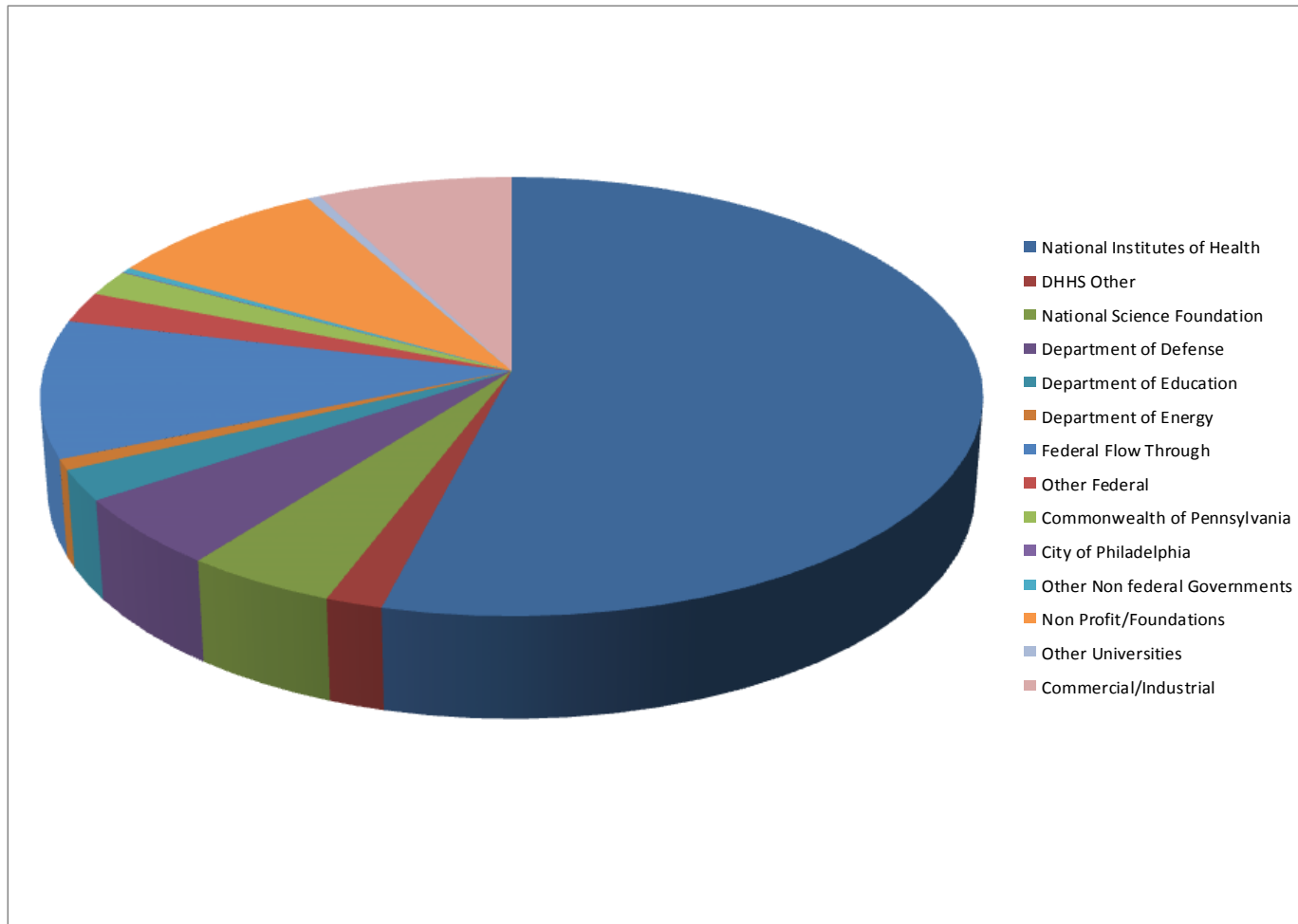
Employees: 33,194

12 Professional and Graduate Schools

142 Research Centers and Institutes



External Sponsored Programs Funding Sources



Research Support by the Numbers

- NIH/DHHS: \$444,076,683
- Non-Profit/Foundations: \$68,923,226
- Corporate: \$59,755,161
- Department of Defense: \$41,228,224
- NSF: \$37,171,347

TOTAL: \$ 797,039,138 (more than 5,800 awards)



Purpose of the U.S. Export Control Laws

Export Control Laws (ECLs) are federal laws that govern how items, technology, and data may be exported from the U.S. or shared with foreign persons within the U.S. The main reasons for ECLs are to:

- Protect national security by:
 - **Curtailing exports of militarily significant items and technologies to U.S. adversaries**
 - **Preventing terrorism**
- Prevent the proliferation of weapons of mass destruction
- Further U.S. foreign policy and Trade agreements
- Preserve U.S. economic competitiveness



What is an export?

- Shipment of goods out of the U.S.
 - U.S. origin materials to another country
 - U.S. origin materials from one foreign country to another or from a foreign country back to the U.S. (re-export)
- Electronic transmission out of the U.S.
 - Any media (phone, fax, email)
- Release of technology to a foreign national in the U.S. (***deemed export***)
 - Lab tour, presentations and discussions at meetings, etc.



Three different federal agencies have primary responsibility for ECLs

- **Department of State** through the International Traffic in Arms Regulations (**ITAR**) administered by the Directorate of Defense Trade Controls (**DDTC**)
- **Department of Commerce** through the Export Administration Regulations (**EAR**) administered by the Bureau of Industry and Security (**BIS**)
- **Department of Treasury** through the Office of Foreign Asset Controls (**OFAC**)
- **Also DOE and NRC**



Department of State (DDTC)

- Determines regulatory authority for new technologies through Commodity Jurisdiction process
- Administers the **ITAR** (primarily military and listed on the United States Munitions List (USML)).
 - Defense articles
 - Defense services
 - Related technical data
- Examples would be night vision goggles, lasers meeting military specifications, etc..
- For a list of controlled technologies see 22 CFR 121.1 (http://www.pmddtc.state.gov/regulations_laws/documents/official_itar/ITAR_Part_121.pdf)



DDTC Export Licenses

- **The export of defense articles, defense services or ITAR controlled technical data requires a license from DDTC.**
- **Applicable exemption for technical data:**

A U.S. company may export unclassified controlled technical data to a U.S. person employed by that company overseas. A U.S. company employee may also travel abroad with such technical data so long as the information is not shared with foreign nationals abroad.

A record of the export must be maintained including a description of the data, method of transmission, and date and time of the export.



Department of Commerce (EAR)

The EAR covers

- technologies and technical information with **both commercial and military applications**, (chemicals, biologicals, telecommunications, software, computers, etc.).
- military items not enumerated on the USML.
- Solely civil use items depending on the end use/end user

Lists of controlled technologies are found in 15 CFR 774, Supplement I, [referred to as the Commerce Control List (CCL)]<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=2f218f17d3e9d4d8f1d488381d5b0da8&rgn=div5&view=text&node=15:2.1.3.4.45&idno=15#15:2.1.3.4.45.0.1.3.87>



The Commerce Control List (CCL)

- The CCL is a positive list. Controlled items and technologies are specifically enumerated and assigned an export control classification number (ECCN)
- Any item not specifically enumerated is designated as EAR99



BIS Export Licensing

- Licensing requirements for items on the CCL depend on:
 - What the item is
 - Where it is going
 - What it will be used for
 - Who will be using it
- The ECCN provides the information needed to make the determination of whether or not a license is required for an export



BIS license Exceptions

- Many licensing exceptions exist under the EAR. Applicability depends on the ECCN and the destination. Ones commonly used in the academic environment include:
 - TMP: temporary exports of equipment or technical data
 - APP: exports of some computers
 - BAG: export of personal items



Educational Activities

Both the ITAR and the EAR have provisions that exclude most university teaching:

- ITAR: definition of technical data excludes “information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities”
- EAR: Educational Information exclusion for information “released by instruction in catalog courses and associated teaching laboratories of academic institutions”.



Fundamental Research

Fundamental research means basic and applied research in science and engineering, the **results** of which ordinarily are published and shared broadly...as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security concerns.”

-National Security Decision Directive 189



Fundamental Research Exclusion (EAR)

University based research. Research conducted by scientists, engineers, or students at a university normally will be considered fundamental research

(“University” means any accredited institution of higher education located **in** the United States.)



Fundamental Research (ITAR)

Under the ITAR, fundamental research is included in the definition of “Public Domain” information.



Fundamental Research (ITAR & EAR)

University research will **not** be considered fundamental research if:

1. The University or its researchers accept restrictions on publication of scientific and technical information resulting from the project or activity, or
2. The research is funded by the U.S. Government and specific access and dissemination controls protecting information resulting from the research are applicable.



Examples of Specific Controls

- Requirement of pre-publication review AND approval
- Limitation on participation to U.S. persons or citizens
- Requirement of prior approval for foreign person participation



Caution!

**Not all university research without publication restrictions is uncontrolled.
Consider the flow chart below.**



If the pre-existing information is in the public domain, and there are no restrictions on who may participate, then the entire project is fundamental research.

If the pre-existing information is in the public domain but there are restrictions on who may participate, then the research activities are controlled, even though the results may be freely published.

If the pre-existing information is not in the public domain (proprietary), then it is controlled, and the activities using that information are controlled, even though the results may be freely published.



What does this mean for Universities?

1. It is important to identify research subject to ECLs.
2. It is important to understand the contractual terms and conditions associated with the research funding.
3. It is important to understand that international shipments are **always** subject to applicable ECLs
4. It is important to verify that international travel and financial transactions are permissible under existing ECLs.



Building a compliance Program

- Perform a risk assessment
 - What are your institution's core competencies?
 - What activities intersect ECLs?
- Establish procedures appropriate to those risks
 - Identify current practices that can be used as foundation
 - Screening procedures (contract review, etc.)
 - Appropriate controls
- **Establish appropriate training programs**
 - Customize to roles
- Recordkeeping, audit, process improvement monitoring



Defining Responsibilities

- Faculty Researcher
- Compliance Office
- Institution
- Regulatory Agency

How are interactions managed?



Clear Communications

- Is everyone speaking the same language?
 - Are common terms defined in the regulations?
 - e.g. from U.S. “use”
- How do these definitions (or lack thereof) impact the compliance program?
- Are procedures for seeking regulatory guidance clear?
- What to do while waiting for response to a request for guidance?
 - Impact on research
 - Impact on decision to seek guidance



Identifying Controlled Research

- Use of equipment enumerated in the regulations
- Language in the RFP, BAA or award documents identifies export controls
- There are restrictions on publication or on who might participate
- Proprietary information is being used in the conduct of the research
- International collaboration
- International travel or presentation at international conferences
- Presentations at closed conferences or meetings
- Contracts with government sponsors funding research with potential military applications



If activities are controlled

Develop an appropriate Technology Control Plan (TCP).

The TCP:

- Identifies the reasons for control
- Identifies who is responsible for maintaining the controls
- Establishes security procedures to prevent inadvertent export of the controlled technology
- Ensures compliance with ECLs

It is the responsibility of PIs to identify potential controls and work with export control staff to make sure that ECLs are not violated.

