



University of
Massachusetts
UMASS Medical School

Export Compliance UMMS Worcester November 2011

UMass Medical School Worcester

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How Many of You Do This?

- International travel or collaboration
- Send information or items to foreign countries
- Work with any sensitive or export-controlled technologies
- Conduct work under service agreements
- Hire foreign students or visiting faculty
- Use foreign sponsors or vendors
- Conduct work that has personnel or publication restrictions

If YES, Then....

- **EXPORT CONTROL COMPLIANCE applies to you!**
- It is your responsibility to know whether your activities are considered 'export controlled'
- UMMS Office of Research can assist you in making determinations, applying for a license, and evaluating whether any exemptions or exceptions apply

What is an Export?

- Any transfer to any person or entity of goods, technology, or software by physical, electronic, oral or visual means with the knowledge that the item(s) will be shipped, transferred, or transmitted to a non-U.S. entity or individual.
 - This includes emails of proprietary information.
- Any disclosure of technical data or information to a foreign entity or individual, by any means, inside or outside the U.S.
 - Includes interactions with a foreign person visiting or on assignment.
 - Includes interactions while you are on foreign travel.
- Any transfer of goods, technology, or software, by any means, to a foreign embassy or affiliate.

What is a Foreign Person/Entity?

- Any non-US Citizen who is not a lawful permanent resident (Green Card holder).
- Any foreign corporation, business, trust or other entity not incorporated in the US.
- International organizations, foreign governments, and agencies or subdivisions of foreign governments.

Oversight Agencies

Commerce Dept - Export Administration Regulations (EAR)

- Regulates items designed for commercial purpose but which can have military applications, (e.g. computers, pathogens, civilian aircraft)
- Covers both the goods and the technology

State Dept - International Traffic in Arms Regulations (ITAR)

- Covers military items
- Includes most space-related technology (application to missile tech)
- Includes technical data related to defense articles and defense services

Nuclear Regulatory Commission

- Nuclear materials and technology (some is also under EAR 0)

Treasury - Office of Foreign Assets Control (OFAC)

- Trade sanctions, embargoes, restrictions on certain end-users, terrorism, anti-narcotics

Commerce Control Categories

For Full Listing of Part 774, go to: http://www.gpo.gov/bis/ear/ear_data.html

Category 0 - Nuclear Materials, Facilities & Equipment (and Miscellaneous Items)

Category 1 – Materials, Chemicals, Microorganisms, and Toxins

Category 2 – Materials Processing

Category 3 – Electronics

Category 4 – Computers

Category 5 (Part 1) – Telecommunications

Category 5 (Part 2) – Information Security

Category 6 – Sensors and Lasers

Category 7 – Navigation and Avionics

Category 8 – Marine

Category 9 – Propulsion Systems, Space Vehicles and Related Equipment

Supplement No. 2 to Part 774 - General Technology and Software Notes

Supplement No. 3 to Part 774 - Statements of Understanding

U.S. Munitions List Categories

For Full listing, go to <http://www.fas.org/spp/starwars/offdocs/itar/p121.htm>

I-Firearms

II-Artillery Projectors

III-Ammunition

IV-Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs and Mines

V-Explosives, Propellants, Incendiary Agents, and Their Constituents

VI-Vessels of War and Special Naval Equipment

VII-Tanks and Military Vehicles

VIII-Aircraft, [Spacecraft] and Associated Equipment

IX-Military Training Equipment

X-Protective Personnel Equipment

XI-Military [and Space] Electronics

XII-Fire Control, Range Finder, Optical and Guidance and Control Equipment

XIII-Auxiliary Military Equipment

XIV-Toxicological Agents and Equipment and Radiological Equipment

XV-Spacecraft Systems and Associated Equipment

XVI-Nuclear Weapons Design and Test Equipment

XVII-Classified Articles, Technical Data and Defense Services Not Otherwise Enumerated

XVIII-[Reserved]

XIX-[Reserved]

XX-Submersible Vessels, Oceanographic and Associated Equipment

XXI-Miscellaneous Articles

XXII(b) Lasers

Remember: Publish or Perish

- Use the Fundamental Research Exemption!
 - Publish, share and disseminate
 - No restrictions for foreign nationals
- Some technologies (advanced encryption) ineligible for FRE
- FRE limited under ITAR because of the jurisdiction over goods and technologies designed to kill people

Fundamental Research Exclusion

- National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical and Engineering Information issued 9/21/85 established national policy for controlling the flow of this information produced in federally funded fundamental research at colleges, universities and laboratories.
- Reaffirmed in letter from Condoleezza Rice, Asst. to the President for Security Affairs on 11/1/01.

Fundamental Research Definition (NSDD 189)

- Basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, 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 reasons.

The Fundamental Research Exclusion (FRE) can be lost if...

University based research is not considered “fundamental research” if ...

- You accept restrictions on the publication of the results of the project
 - Pertains to many industry contracts and testing agreements
 - EAR/ITAR have a carve-out for delay of publication for a pending patent application
- If the PI has made a “**side deal**”
 - Could take place via a **non-disclosure agreement** or acceptance of export-controlled information

The FRE can be lost if...

- The agreement requires sponsor approval prior to publication
 - Sponsor “Review” vs “Approval”
 - Okay to review and comment, but not approve
- The government contract involves an ITAR project with access and dissemination of information controls
 - There is a carve-out under the EAR
- There is a transfer of defense services
 - Potential license requirements for work with foreign nationals

What Is a Deemed Export?

- **Transfer of information *within* U.S.** to a foreign person
 - Transfer is 'deemed' to apply when a foreign person receives it
 - Transfer may **include conversations, faxes, emails**, leaving sensitive materials in open area, etc.
 - Transfer may include transfer of information about equipment if that information is not published in an operating manual

For FAQs on Deemed Exports, go to
<http://www.bis.doc.gov/deemedexports/deemedexportsfaqs.html>
- **Visa status is important**
 - Permanent resident (green card holder) – Considered U.S. citizen and No License Required (NLR)
 - Non-immigrant visa holders must meet export control requirements (license may be required)
 - New visa regulations (I-129 form) require PIs to attest there will be no disclosure of controlled information or technology to new hires

“Use” Technology

- **A potential deemed export must be considered “use” technology.**
- **To qualify as “use” technology, the user must be able to do all of the following:**
 - Operate
 - Install
 - Maintain
 - Repair
 - Overhaul
 - Refurbish
- **If all 6 criteria are met, deemed export licensing is necessary.**

Sanctions/Embargoes

- **Focus on end-user or country** (rather than technology)
- **Administered by Treasury Department (OFAC)**
 - **NO** transfer/trade/payments to **Cuba, Iran, N. Korea, Sudan, Syria**
 - Prohibitions/restrictions on transfer/trade/payments on trade to certain other countries (ex. Libya)
 - Additional information: <http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>
- **Payments/limitations also prohibited to other listed countries and terrorist-supporting entities**
- **Additional prohibitions under ITAR and EAR**
 - EAR restricts exchanges with Israel, Russia, etc. because of proliferation concerns
 - No shipments subject to ITAR may be shipped to Libya

Who Needs to Know...

- Faculty in high-risk disciplines
 - Chemistry, Physics
- Faculty who have restricted research
- All personnel travelling internationally
- Anyone sending **ANYTHING** out of the U.S.

UMMS - Worcester Office of Research

- Role is to help you understand:
 - Types of items/information controlled
 - How to meet regulatory requirements
 - How to deal with a restricted project
 - Vet various transactions (ex. international travel)
- Assists to put controls in place for restricted projects (Technology Control Plans)
- Project with restrictions **MUST** be approved by the UMMS Office of Research **AND** a TCP put in place

Export Control Regulations

Regulations	Export Administration Regulations (EAR)	International Traffic in Arms Regulations (ITAR)	Sanction Programs
Who regulates?	Department of Commerce Bureau of Industry and Security (BIS)	Department of State	U.S. Treasury Office of Foreign Assets Control (OFAC)
How do they regulate?	Commerce Control List (CCL)	U.S. Munitions List (USML)	Specially Designated Nationals List (SDN) and OFAC Sanctions Programs
What do the regulations cover?	Dual Use Items: items that may have both commercial and military applications	Defense articles and services, some cryptography systems, space technology, classified technologies	Countries and Individuals that are prohibited end users of certain items

Example Scenarios

- Research agreements that restrict personnel or publications
 - ex. DOD- FRE invalidated, License and/or TCP may be necessary
- Service agreements to do materials testing
 - ex. Using controlled materials where we have technical data negates the FRE, requires TCP
 - Developing form to provide to companies up front to facilitate process
- Physical exports
 - Ex. ANYTHING out of the U.S.
- Deemed exports-transfer of controlled information
 - Ex. Sharing information that is NOT publicly available with a foreign person
- Letters to sponsor international visitors
 - Ex. for other than educational purposes or from someone on the entity list
- Hiring foreign nationals when you have a restricted project
 - Ex. Must declare on new I-129 form w ISSO
- International travel with computers or scientific equipment
 - Ex. Travel to China with equipment and potential problems

Case Study

- A retired University of Tennessee physics professor helped to develop technology that could be used to advance flight controls for unmanned drone aircraft.
 - Research involved plasma physics applied towards exploring theoretical advantages in aeronautical engineering.
 - U.S. Department of Defense subsidized the work.
- He was found guilty of unlawfully transferring "defense articles" to a graduate student, a national of China, in violation of the Arms Export Control Act (AECA).
- Other accusations included:
 - Taking reports and related studies in his laptop to China during a lecture tour in 2006.
 - Having a report e-mailed to him there via a Chinese professor's email account.
 - Taking a laptop, which contained sensitive information, outside the country. (The Prosecution claimed that the laptop itself was an illegal export.)

Case Study (continued)

- He was convicted on 17 counts of conspiracy, violating the AECA and wire fraud, and sentenced to 4 years imprisonment.
- Remarks from the accused: "My understanding was that it only applied to things that worked, and we had not shown that. We had a lot of work to do."
- Remarks from the prosecution: "Today's guilty verdict should serve as a warning to anyone who knowingly discloses restricted U.S. military data to a foreign national."

You must consider the potential applications of your research, when determining who should have access to that research.

Important Exceptions for Academia

- Technical data excludes any information concerning:
 - General principles of science, mathematics or engineering taught in schools, colleges and universities.
 - Public Domain information.
- Public Domain information is defined as:
 - Information that is published in magazines, journals, etc., or released with approval for distribution by the appropriate US government authority.
 - Information that is obtained through fundamental research in science and engineering at accredited US institutions of higher learning and ordinarily published and shared broadly in the scientific community.

Supplement List Review – Special Controls

- Country Group
- Country Chart
- Denied Party List
- Embargoed Countries
- OFAC Debarred Parties List

(<http://www.access.gpo.gov/bis/ear/pdf/740spir.pdf>)

Summary Process

- Are you sending ANYTHING out of the U.S.?
 - Contact UMMS Worcester Office of Research
- Is it fundamental research? If yes, no worries!
 - **If no**, contact UMMS Worcester Office of Research to:
 - Determine jurisdiction and classification
 - Then check Country Group, Reason for Control, Country Chart, Lists (OFAC, BIS, etc.)
 - Evaluate if any exemptions or exceptions apply or whether a license is needed
 - If license is required, UMMS Worcester Office of Research submits

Remember.....

- Contact the Office of Research whenever you have questions
 - Diego Vazquez, 508 856-5600
- Do NOT assume anything
- Violations include fines, prison time, and public disclosure, and more

Don't let this happen to you!

<http://www.bis.doc.gov/>

