THE UNIVERSITY OF IOWA

EXPORT CONTROL MANAGEMENT PROGRAM

The University of Iowa Export Control Management Program

Table of Contents

Introduction	2
University of Iowa Policy on Export Control Management	3
Responsible Institutional Official	4
Process for Implementation of Export Control Management Program	5
Principal Investigator	5
Division of Sponsored Programs	6
Office of General Counsel	9
Export Control Advisory Group	9
Access Control Plans	10
Internal Review of Program	11
Training on Export Control	12
Recordkeeping	
Actual Exports	
Export Controls and University Research	
I. General Implications for University Research	
II. Overview of Export Control Regulations and OFAC Boycott Program	16
A. Export Administration Regulations (EAR)	
B. The International Traffic in Arms Regulations (ITAR)	
C. OFAC Boycott Program	
III. Applicable Definitions	
Export	
Deemed Export	
Defense Service	
Foreign Persons	
Fundamental Research	
Public Domain	
Technical Data	
Defense Service	
IV. Exclusions/Exemptions from Export Control Regulations	
Fundamental Research Exclusion	
Educational Instruction Exclusion	
Public Domain/Publicly Available Exclusion	
Exemption for Disclosures to Bona Fide Full-time Employees	22

Introduction

As an academic institution, the University of Iowa adheres to the fundamental principles of academic freedom and openness in research. These principles require the free and open communication of research results and the unrestricted ability of all interested persons to participate fully in the intellectual life of the University.

At the same time, heightened concerns about national security have resulted in stricter interpretation and enforcement by the federal government of our nation's laws restricting the export of sensitive technologies and information. As it relates to academic research, this federal initiative often results in restrictions that conflict with free and open scientific inquiry.

Our challenge is to carry out our research activities in a manner that is consistent with both open scientific inquiry and the federal laws on export controls. To this end, the University has created an Export Control Management Program and provides this document to describe the details of that program. Because the export control laws apply to individuals as well as institutions, all University of Iowa employees working in affected areas of research should be familiar with the issue of export controls and understand their role in carrying out the University's management program.

The University provides information on export controls and their effect on research to its faculty, staff, and students on the web page of the Vice President for Research at this location: https://research.uiowa.edu/dsp/export-controls-home

<u>University of Iowa Policy on Export Control Management</u>

University of Iowa policy (https://opsmanual.uiowa.edu/community-policies/ research) requires that all research conducted within the institution be consistent with all of the following objectives:

- The education of undergraduate, graduate, and postdoctoral students
- The advancement of knowledge through research and scholarship
- The preservation and dissemination of knowledge
- The advancement of the public welfare

University policy (https://opsmanual.uiowa.edu/community-policies/research) also requires that the purpose and results of any research conducted using institutional resources and facilities must be freely communicable.

Both of these policy statements reflect the fact that research conducted by the faculty, staff, and students of The University of Iowa is public domain fundamental research as that term is defined in National Security Decision Directive 189 (http://www.fas.org/irp/offdocs/nsdd/nsdd-189.htm). As such, most University of Iowa research will not be subject to export control laws. The University will make every effort to maintain the public and fundamental nature of our research, as a means of preserving the very heart of our academic mission and as a means of limiting the application of export control laws to our research activities.

At the same time, the University recognizes that there may be cases in which our research by necessity will involve information, materials, or equipment subject to export control laws. Where export controls are applicable to our research activities, it is the policy of the University of Iowa to fully comply with those laws. It is therefore the responsibility of each University of Iowa employee, with administrative and legal support from the University, to understand the export control implications of his/her research, to understand any export control restrictions that the law may impose on that research, and to ensure that those restrictions are strictly observed in the research.

Failure to comply with this policy may result in the University's imposition of disciplinary sanctions up to and including termination. In addition, failure to comply with the federal laws regulating export controls may subject the individual to federal prosecution and/or the imposition of federal civil and/or criminal sanctions as provided by those laws.

Responsible Institutional Official

The University has designated, the Executive Director of the Division of Sponsored Programs as the senior-level administrator responsible for oversight of its Export Control Management Program as it relates to research. On behalf of the institution, the Executive Director of the Division of Sponsored Programs is authorized to sign license applications and other documentation relating to export-controlled materials, to serve as the custodian of any required records, and to serve as the point of contact for communications with regulatory agencies. In this role, the Responsible Institutional Official is also the Empowered Official for the University and works under the general guidance of the Vice President for Research and is provided legal counsel by the Office of General Counsel.

Process for Implementation of Export Control Management Program

The University has developed a process to ensure that all of its research activities are conducted in compliance with export control regulations. This process involves:

- Conducting a thorough review of projects and contract provisions to determine whether and how a particular research projected is affected by export control regulations
- Managing export-controlled research to ensure that it is conducted in full compliance with the law

This process involves a cooperative effort between the Principal Investigator, the Division of Sponsored Programs, and the Office of General Counsel. The role of each is described below.

Principal Investigators

The PI has the best understanding of his or her research and therefore the best information as to whether the particular technology, data, or information involved in that research is or may be covered by export control regulations. The PI is responsible for doing the following:

- The PI should carefully review the information on export controls provided on the University's export controls web site https://research.uiowa.edu/dsp/export-controls-home. Additional training on export controls is provided by the Division of Sponsored Programs and is available to PIs, their departments, and their departmental administrators. PIs who work in areas potentially subject to export controls are responsible for understanding the basic requirements of the law and the importance of compliance with those requirements.
- Before beginning any research, and in a timely enough manner to permit any potential issues to be clarified and/or resolved, the PI should determine whether any export control issues may be presented in his or her project. Basically, any research activity may be subject to export controls if it involves the actual export or "deemed" export of any goods, technology, or related technical data that is either 1) "dual use" (commercial in nature with possible military application) or 2) inherently military in nature.

Work in the following areas is considered high risk:

- Engineering
- Space sciences
- Computer Science and Information Systems
- Biomedical research with lasers
- Research with encrypted software

Research with controlled chemicals, biological agents, and toxins

In addition, any of the following raise export control questions for the project:

- Sponsor restrictions on the participation of foreign nationals in the research
- Sponsor restrictions on the publication or disclosure of the research results
- Indications from the sponsor or others that export-controlled information or technology will be furnished for use in the research
- The physical export of controlled goods or technology
- Collaboration with foreign colleagues
- If any such issues are identified, or if any question exists, the PI should contact the Division of Sponsored Programs at 335-2123 and speak with the Export Control Coordinator for help with determining whether any export control restrictions may apply to the research.
- After work on the project has begun, the PI should notify the Division of Sponsored Programs Export Controls Coordinator prior to implementing any changes that may give rise to the application of export controls, such as a change in the scope of work, the addition of new staff to the project, or the actual export of physical items or software to another country.
- If any export control issues are identified at the contract or grant proposal stage by the staff in the Division of Sponsored Programs, the PI should cooperate fully with DSP to determine the application of export control regulations to the research.
- If it is determined that export controls apply to the project, the PI must adhere strictly to any applicable restrictions and cooperate fully with the University's efforts to monitor compliance. The PI is responsible for ensuring that any controlled materials are managed according to any control plans implemented for the research.
- In general, researchers should avoid entering into any type of agreement that could destroy the fundamental research exemption by restricting publication or dissemination of the research results (such as non-disclosure or confidentiality agreements relating to research, MTAs with confidentiality provisions, and research agreements with confidentiality provisions) or by limiting the participation of foreign nationals in their research.

Division of Sponsored Programs

The Division of Sponsored Programs is responsible for administering the University's Export Control Management Program for research activities. The

Export Controls Coordinator is the DSP staff member assigned to work with PIs on the administrative issues arising from the application of export controls to their specific research. The Export Controls Coordinator may be contacted at 335-2123.

In addition, the Division of Sponsored Programs is responsible for the following with respect to export controls:

- DSP may work with PIs at the proposal stage to identify any export control issues presented by the proposed research and, in consultation with the Office of General Counsel, will assist the PI in determining whether export control regulations are likely to apply to the project.
- Appropriate DSP staff will review research agreements, including incoming CDAs and MTAs and grant award documents for export control language and for terms or provisions that restrict access to or prohibit publication of research results, limit the participation of foreign nationals in the research, or otherwise render the fundamental research exclusion inapplicable.
- Where export control provisions are present in research agreements or grant award documents, DSP will attempt to eliminate or acceptably modify them through negotiation. Any such negotiations will reflect the following:
 - University of Iowa research is public domain fundamental research and very often involves the participation of foreign nationals both on campus and abroad;
 - The University will therefore assume that information, materials, or equipment/technology provided pursuant to a research agreement is not subject to export controls;
 - The University will look to the provider of such information, materials, or equipment to acknowledge and mark export controlled information, materials and equipment accordingly and will retain the right to reject receipt of export controlled items or information.

Consistent with these principles, the Office of General Counsel has provided DSP with acceptable language for use in negotiation. That office will be consulted prior to any substantive deviation from the language provided.

• If such provisions cannot be eliminated or acceptably modified through negotiation, and if it appears that no exclusions or exemptions from the export control regulations are applicable, DSP will consult with the PI to determine whether the technology or other material to be used in the research is included on the Commerce Control List

(http://www.access.gpo.gov/bis/ear/pdf/ccl0.pdf) or the US Munitions List

(<u>http://pmdtc.org/docs/ITAR/2004/22cfr121_Part_121.pdf</u>). As part of this process, DSP may use these forms as applicable:

 DSP Export Control Evaluation Checklist and the Evaluation for Export Control Application (https://research.uiowa.edu/dsp/files/record-of-export-control-review-form.pdf)

This form is used to determine the initial applicability of EAR/ITAR.

 Certification on the Handling of Export-Controlled Information <u>https://research.uiowa.edu/dsp/files/certification-handling-export-form.pdf</u>

The PI will be asked to sign this form attesting that s/he has knowledge of export control regulations and of the penalties associated with noncompliance.

- Where it appears from DSP's initial analysis that export control regulations may apply to the project, DSP will consult with the Office of General Counsel as needed and provide written notice of that initial determination to the PI. The department chair, the dean, and the Vice President for Research may also be notified of this initial determination. In the event it is determined that export controls apply to the research, this notice may include:
 - A listing of the contract provision(s) giving rise to the application of export controls;
 - A discussion of the implications of such restrictions for the project, including the effect on educational activities, scholarly exchange, and management of facilities and personnel; and
 - Identification of any compliance measures that must be implemented before work on the project begins.
- Where it is determined that a license is required, DSP will work with the PI and his/her department to apply for and obtain the necessary license or other appropriate form of approval before work on the project is started. In consultation with the Office of General Counsel, DSP will notify the PI in writing of any restrictions imposed by the license or approval and obtain the PI's confirmation indicating understanding and acceptance of those restrictions for the project.
- With advice and input from the Office of General Counsel, DSP will provide information and training on export control regulations to the University research community. For more information on these activities, contact the Export Controls Coordinator in DSP at 335-2123.

- 9 -	

Office of General Counsel

The Office of General Counsel serves as legal advisor to the University and will provide counsel to both the PI and the Division of Sponsored Programs on legal issues involving the application of export control regulations to University activities. The Office of General Counsel may be consulted where it appears from DSP's analysis that export control regulations may apply to the project, where there is a proposed substantive deviation from the University's approved contract language on export controls, or where an access control plan is to be developed. The OGC staff attorney available for consultation on these issues is Deputy General Counsel Grainne Martin (335-2742 or grainne-martin@uiowa.edu). As needed, the Office of General Counsel may engage the services of outside counsel on specific questions in this area.

Export Control Advisory Group

The Vice President for Research has appointed an Export Control Advisory Group to advise the Responsible University Official on the practical aspects of implementing the Export Control Management Program for specific areas of research in the University. While membership of the Advisory Group may change from time to time, it will include, whenever possible, a representative from the College of Engineering, the Department of Physics and Astronomy, and the Department of Computer Science. A representative from the Office of General Counsel and at least one from DSP will also be included.

Access Control Plans

Where export controls are determined to apply to a project, the PI will cooperate fully with the University to develop a plan for controlling access to the export-controlled materials or technology. The purpose of such a plan is to identify the controls necessary to ensure that transfer of export controlled materials does not occur in violation of the law or inconsistent with the terms of any applicable license or other approval. At a minimum, access control plans should include the following:

- A thorough description of the materials or technology to which access is to be controlled;
- · A description of the specific means to control access;
- A description of how the members of the research team will be trained regarding their obligations for complying with the access control plan; and
- A plan for monitoring adherence to any specific restrictions imposed.

The University will not sign agreements involving export controlled materials or technology until a documented access control plan approved by the department and the college is on file with DSP.

Plans for managing any materials that will be placed on University computer systems must be reviewed and approved by the University Security Officer in Information Technology Services and, where appropriate, by the departmental information technology professional.

The PI is responsible for ensuring that all export-controlled materials/technology are managed according to any access control plan implemented for the research.

Internal Review of Program

At appropriate times, but not less than annually, the University will conduct an internal review of the implementation of its Export Control Management Program. The purpose of the review will be to confirm the following:

- that the processes established for administering the program are sufficient in nature and scope;
- that all required documentation and records are maintained; and
- that appropriate training activities are conducted and informational materials delivered.

This internal review will result in a report provided to the Vice President for Research. The report will include a process for confirming that any recommended corrective action has been taken, including any recommended changes to the Program itself.

Training on Export Controls

With advice and input from the Office of General Counsel, the Division of Sponsored Programs is responsible for conducting training activities on export controls for affected faculty, staff, and students, and for creating adequate and current informational materials to accompany those activities. These training activities include the University's export controls web site located at

https://research.uiowa.edu/dsp/export-controls-home; regular communications providing information about new developments on export controls; in-person or other presentations to departments and other research units/groups tailored to specific export control issues in those areas; and other training activities as may be deemed appropriate and effective to educate the University research community about export control laws and their application to research. The Division of Sponsored Programs will actively promote the availability of the University's training activities on export controls and will maintain appropriate records of such activities as they are conducted.

Recordkeeping

The Responsible Institutional Official will oversee the centralized process for maintaining accurate records and documentation relating to implementation of the University's Export Control Management Program in its research activities. The objective will be to retain those records that substantiate the University's compliance with applicable export control laws. These records will be retained for a period of time consistent with current regulatory requirements, but in no event fewer than five years from the date of the export, reexport, or any other termination of an export-related transaction. Records to be maintained include, but are not limited to, the following:

- Documentation of the processes/procedures developed by the Division of Sponsored Programs for the administrative implementation of the University's Export Control Management Program;
- Documentation of determinations about the applicability/inapplicability of export controls to a specific research project, including documentation of the applicability of any exceptions or exemptions from the regulations;
- Licensing applications and all information related to the preparation of such applications;
- Issued licenses or other regulatory permissions;
- Documentation of training activities conducted and attendance at/participation in such activities;
- Documentation of any restrictions imposed on specific research projects in terms of access to export-controlled information or materials, including any applicable access control plan, and compliance with any such restrictions/plan;
- A current copy of the University's Export Control Management Program and any attachments;
- A copy of the results of any internal reviews of the University's Export Control Management Program, as well as documentation of any corrective actions taken in response to such reviews.

Actual Exports and Travel Outside the US

Exports of materials, information, or equipment/technology outside the US may be subject to export control laws. This may include shipping items outside the country or taking items (such as laptops or other equipment) outside the country during travel. Travel to certain countries for the purpose of conducting research or related activities may pose particular issues. Prior to undertaking any such actions, PIs should alert DSP to the planned activity (and the UI Research Foundation where an outgoing Material Transfer Agreement may be required).

Current information regarding countries of particular concern may be found at http://www.ustreas.gov/offices/enforcement/ofac/programs/.

Export Controls and University Research

As part of its Export Control Management Program, the University provides the following information relating to export controls as they relate to the University's research activities:

I. General Implications for University Research

Federal export control regulations prohibit the export to foreign countries of certain goods, technology, and technical data without an export license issued by the government. These regulations were implemented many years ago for reasons relating to national security, economic and trade protection, and the advancement of foreign policy goals. The events of 9/11 in particular have resulted in stricter interpretation and enforcement of these regulations by the federal agencies that administer them.

University of lowa researchers need to be aware of export control regulations and their possible impact on research. In summary, the term "export" as used in these regulations includes not only the actual export or shipping of goods to foreign countries, but also so-called "deemed exports": the transfer/disclosure in any form (verbal, written, electronic, visual) within the US of export-controlled items or information to a "foreign national" (anyone who is not a US citizen or permanent resident). As a result, where export control regulations apply and where no regulatory exemption is available, an export license will be required before export-controlled items or information can be shared, abroad and even on campus, with foreign nationals participating or collaborating in affected research projects. These activities, among others, may be restricted:

- The ability of foreign scholars and students to participate in export-controlled research at the University of Iowa;
- The ability of University of Iowa researchers to disclose or discuss previously unpublished research at conferences and meetings where foreign nationals are in attendance;
- The ability of University of Iowa researchers to engage in collaborations with foreign researchers, including restrictions on teaching foreign collaborators how to use export-controlled items in research (regulated as providing a "defense service"); and
- The ability to transfer research equipment abroad.

Such restrictions are directly at odds with university traditions of open access and dissemination of research results. Fortunately, the vast majority of university research is not subject to export controls, either because the research does not involve export-controlled items or data, or because research involving such items or

data qualifies for an exemption from the regulations. However, where export control regulations apply, the penalties for non-compliance are severe (up to \$1,000,000 per violation and imprisonment up to 10 years) and may be imposed against individual researchers as well as their institutions.

II. Overview of Export Control Regulations and OFAC Boycott Program

The export control regulations most frequently encountered by the university research community are the following:

A. Export Administration Regulations (EAR)

The Export Administration Regulations (EAR), 15 CFR §§730-774 (http://beta-www.bis.doc.gov/index.php/regulations/export-administration-regulations-ear) are administered by the US Department of Commerce Bureau of Industry and Security (BIS). They regulate the export of so-called "dual use" items, i.e., goods and related technology designed for commercial purposes but which could have military applications, such as computers, aircraft, and pathogens. The list of EAR-controlled items (the "Commerce Control List" or "CCL") is published at 15 CFR §774, Supplement 1)(http://beta-www.bis.doc.gov/index.php/regulations/commerce-control-list-ccl). Searchable list of CCL items is available at (http://beta-www.bis.doc.gov/index.php/regulations/search-the-ear).

The CCL categorizes covered items into the following ten categories (which each have subdivisions):

- 0) Nuclear materials, Facilities and Equipment, and Miscellaneous
- 1) Materials, Chemicals, Microorganisms, and Toxins
- 2) Materials Processing
- 3) Electronics
- 4) Computers
- 5) Telecommunications and Information Security
- 6) Lasers and Sensors
- 7) Navigation and Avionics
- 8) Marine
- 9) Propulsion Systems, Space Vehicles, and Related Equipment

For goods and technology listed on the CCL, a license will be required for export, unless an exclusion or exemption applies. Where embargoed countries are involved, a license will be denied. Current information regarding countries of particular concern may be found at http://www.ustreas.gov/offices/enforcement/ofac/programs/.

There is an additional "catch-all" category in the regulations, the "EAR 99," which covers any good or technology that is "subject to the EAR" as defined in 15 CFR §734.3(a) but is not on the CCL. Items in the EAR 99 category may or may not require a license, depending on the country involved, the individual(s) to whom the export will be made, and the proposed use of the item.

B. The International Traffic in Arms Regulations (ITAR)

The International Traffic in Arms Regulations (ITAR), 22 CFR §§120-130 (http://pmdtc.org/reference.htm), are administered by the US Department of State, Directorate of Defense Trade Controls (DDTC). They regulate the export of defense articles, defense services, and related technical data ("defense" meaning that the government has determined the article, service, or data to be inherently military in nature). The list of ITAR-controlled items is published at 22 CFR §121 (the "US Munitions List" or "USML") and is available at (http://pmdtc.org/docs/ITAR/2004/22cfr121 Part 121.pdf).

The USML covers 21 categories (including chemical and biological agents in addition to various weapons, vehicles, missiles, equipment, and electronics) and is less specific than the EAR CCL. Again, the items on the list have been determined by the Department of State to be inherently military in nature (basically, items designed to kill or defend against death in a military context). Also, although they may not meet this definition, all satellites and related technology are controlled by ITAR as a result of the 1999 Congressional expansion of ITAR jurisdiction. Unless a specific exclusion or exemption applies, licenses are required for the export of an USML-listed item.

C. OFAC Boycott Program

In addition to the EAR and ITAR, the Department of Treasury's Office of Foreign Assets Control (OFAC) administers and enforces economic and trade sanctions based on US foreign policy and national security goals against targeted foreign countries, terrorists, international narcotics traffickers, and those engaged in activities related to the proliferation of weapons of mass destruction. The scope of the boycott program depends on the country involved and is subject to change.

Of particular note is the fact that the OFAC boycott program may prohibit conducting surveys of persons in boycotted countries. The complete and updated list of countries included in the boycott program may be viewed at http://www.ustreas.gov/offices/enforcement/ofac/sanctions/.

III. Applicable Definitions

Export control decisions depend on a clear understanding of the following terms. When making specific application determinations, however, the official regulatory definition should be consulted.

Export: This term is defined very expansively in the export control regulations. Generally, an export includes any: (1) actual shipment of any covered goods or items; (2) the electronic or digital transmission of any covered goods, items or related goods or items; (3) any release or disclosure, including verbal disclosures or visual inspections, of any technology, software, or technical data to any foreign national; or (4) actual use or application of covered technology on behalf of or for the benefit of any foreign entity or person anywhere. Reference should be made to the official definition of export under the EAR and ITAR when determining whether a specific act constitutes an export. As "export" is currently defined, it precludes a foreign national (either faculty or student) from participating in research that involves covered technology without first obtaining a license from the appropriate government agency where no license exception applies.

<u>Deemed Export</u>: An export of technology or source code (except encryption source code) is "deemed" to take place when it is released to a foreign national within the United States. <u>See</u> 15 CFR §734.2(b)(2)(ii) (EAR).

Defense Service (ITAR at 22 CFR §121.9):

- (1) The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles;
- (2) The furnishing to foreign persons of any technical data controlled under this subchapter (see §120.10), whether in the United States or abroad; or
- (3) Military training of foreign units and forces, regular and irregular, including formal or informal instruction of foreign persons in the United States or abroad or by correspondence courses, technical, educational, or information publications and media of all kinds, training aid, orientation, training exercise, and military advice. (See §124.1.)

<u>Foreign Persons</u>: A foreign person is any natural person who is not a lawful permanent resident as defined in <u>8 U.S.C. §1101(a)(20)</u>. It also includes any foreign corporation, business association, partnership, trust, society, or any other entity or group that is not incorporated or organized to do business in the United States, as well as international organizations, foreign governments, and any agency or subdivision of foreign governments (<u>e.g.</u>, diplomatic missions).

<u>Fundamental Research</u>: Includes basic or applied research in science and/or engineering at an accredited institution of higher learning in the United States where the resulting information is ordinarily published and shared broadly in the scientific community. Fundamental research is distinguished from research which results in information that is restricted for proprietary reasons or pursuant to specific U.S. Government access and dissemination controls. "Fundamental research" is defined in the EAR at 15 CFR §734.8 and in ITAR at 22 CFR §120.11.

<u>Public Domain</u>: Information that is published and generally accessible to the public: (1) through sales at newsstands and bookstores; (2) through subscriptions available without restriction to anyone who may want to purchase the published information; (3) through second class mailing privileges granted by the U.S. Government; (4) at libraries open to the public or from which the public can obtain documents; (5) through patents available at any patent office; (6) through unlimited distribution at a conference, meeting, seminar, trade show or exhibition that is generally accessible to the public and is in the United States; (7) through public release (<u>i.e.</u>, unlimited distribution) in any form (not necessarily published) after approval by the cognizant U.S. government department or agency; and (8) through **fundamental research**. 22 CFR §120.11.

Technical data (ITAR at 22 CFR §120.10):

- (1) Information, other than software as defined in 22 CFR §120.10(4), which is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance or modification of defense articles. This includes information in the form of blueprints, drawings, photographs, plans, instructions and documentation.
- (2) Classified information relating to defense articles and defense services;
- (3) Information covered by an invention secrecy order;
- (4) Software as defined in 22 CFR §121.8(f) directly related to defense articles;

Excluded from this definition is information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities or information in the public domain as defined in 22 CFR §120.11. It also does not include basic marketing information on function or purpose or general system descriptions of defense articles.

<u>Defense Service</u> (ITAR 22 CFR §120.9): The furnishing of assistance, including training, to foreign persons, whether in the US or abroad, in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing, or use of defense articles (those listed on the USML).

Furnishing any technical data controlled by ITAR to a foreign person in the US or abroad also constitutes a defense service under the regulations.

IV. Exclusions/Exemptions from Export Control Regulations

There are several common exclusions and an exemption that may remove University research from the application of export control restrictions.

Fundamental Research Exclusion

Fundamental research (basic or applied research in science and/or engineering at an accredited institution of higher learning in the US that results in information that is ordinarily published and shared broadly within the scientific community) is excluded from export control regulations. This means that where University research meets this definition, information (but not materials or technology) resulting from that research may be disclosed to foreign nationals and that disclosure is not subject to export control restrictions.

University research **will not qualify** for this exclusion if: (1) the University or researcher accepts any restrictions on the publication of the information resulting from the research, other than limited prepublication review by research sponsors to ensure that proprietary information is not inadvertently disclosed in publication or to ensure that publication will not compromise the patent rights of the sponsor; or (2) the research is federally funded and specific access and dissemination controls regarding the resulting information have been accepted by the University or researcher.

It is important to remember two things about the fundamental research exclusion: 1) it applies only to information and 2) it **does not apply** to a sponsor's existing proprietary information when some or all of that information is required to be held confidential.

Educational Instruction Exclusion

Export control regulations do not apply to commonly-taught educational information released in academic catalog-listed courses or in teaching labs associated with those courses. This means that a faculty member teaching a University course may discuss what might otherwise be export-controlled technology in the classroom or lab without an export control license even if foreign national students are enrolled in the course. This exclusion is based on the recognition in ITAR that "information concerning general scientific, mathematical, or engineering principles commonly taught in schools, colleges, and universities, or information in the public domain" should not be subject to export control restrictions. 22 CFR §120.10. This exclusion does not apply to encrypted software.

Public Domain/Publicly Available Exclusion

Information that is published and generally available to the public (see "public domain" definition above), as well as publicly available technology and software, is

outside the scope of the export control regulations. This exclusion does not apply to encrypted software, to information if there is reason to believe it may be used for weapons of mass destruction, or where the US government has imposed access or dissemination controls as a condition of funding.

Exemption for Disclosures to Bona Fide Full-time Employees

Export control regulations exempt disclosures of unclassified technical data in the US by US universities to foreign nationals where 1) the foreign national is the University's bona fide full-time regular employee, 2) the employee's permanent abode throughout the period of employment is in the US, 3) the employee is not a national of an embargoed country, and 4) the University informs the employee in writing that information disclosed may not be disclosed to other foreign nationals without governmental approval.

This exemption is likely to be less available than the three exclusions discussed above. In addition, most graduate students are not regular full-time University employees and disclosures to them will not qualify for this exemption.