

EXPORT CONTROL HANDBOOK

for

**Drexel University
and
Drexel University College of Medicine**

INTRODUCTION

Drexel University (“Drexel”) engages in research and educational activities that may involve the development or use of products, goods, hardware, software or materials (collectively, “items”) or technology that may be subject to U.S. export control laws and regulations. The U.S. government increasingly is focused on the compliance of universities with these laws and regulations. Drexel is committed to complying with all applicable export controls, as established by the federal regulations described below. As a result of the severe criminal and civil penalties for noncompliance by Drexel and by individual researchers at Drexel, it is critical that everyone in the Drexel community understands these rules and complies with them fully.

U.S. export control laws and regulations generally impose restrictions on the export of items from the United States. Thus, if you are shipping a product or material to another country, you must make sure that the proposed shipment complies with the export control laws. By the same token, if you are traveling abroad and want to bring certain items with you relating to your work -- research equipment, biological materials, encryption products, and computers – you may need to consult this Handbook.

In addition, under U.S. export control laws and regulations, the release or disclosure of technology to a foreign national in the United States, who is not a U.S. citizen or “green card” holder, is “deemed” to be an export to that foreign national’s country of origin and may be subject to export control licensing requirements. The procedures described in this Handbook apply to the disclosure of export controlled technology and information to foreign nationals at Drexel, regardless of whether this occurs in Drexel facilities, or anywhere else in the United States. The applicability of the “deemed” export licensing requirements to a particular research project or situation can be problematic and require special care.

Most Drexel research and activities will be exempt from the “deemed” export licensing requirements under an applicable exemption, especially the “public domain” and the “fundamental research” exemptions. The overwhelming percentage of Drexel research and related activities will qualify for the “fundamental research” exemption provided it: (1) remains free from any restrictions on publication (other than for patenting or removal of proprietary information supplied by a sponsor); (2) involves information and research that is not subject to any access or dissemination controls; and (3) provides no controls over the use or selection of foreign nationals in the research. The information is deemed to be in the public domain, and no license is necessary for access to this information by foreign nationals.

The purpose of this Handbook is to set forth Drexel’s procedures for complying with U.S. export control laws and regulations. It should serve as a guide to facilitate compliance with U.S. export control laws and regulations, but it is not a substitute for consulting the specific laws and regulations that are relevant to any given transaction or issue. This Handbook also advises you where to turn if you need assistance in determining whether your proposed export complies with the applicable laws.

If a license is required, approvals often can take weeks or months before discussions or transfer of technical data can occur. Drexel personnel -- including principal investigators, other researchers, research fellows, graduate students and post-docs, and visiting scientists -- should identify transactions that may trigger license requirements as soon as possible to provide sufficient time to determine if a license is necessary and, if so, to permit time to apply for the license. If a license or other U.S. government approval is required, then it must be obtained before shipping the product, sharing the research or controlled technology, partnering with companies or international collaborators, traveling to the few highly restricted countries, or sponsoring or participating in certain activities outside the United States.

If required, most licenses generally take from 30 to 60 days to obtain, and can impose restrictions for the handling of technical data on campus. Licenses for sensitive technology or for sensitive destinations can take longer to obtain.

1.0 SUMMARY OF HANDBOOK

Drexel is committed to compliance with applicable U.S. laws and regulations pertaining to exports of items, services, and technology by or on behalf of Drexel. This applies both to exports outside the United States as well as to exports to foreign nationals within the United States.

This Handbook has several objectives.

- First.** It is designed to promote the free exchange of ideas in a research environment that promotes Drexel's mission and programs consistent with applicable restrictions under U.S. laws and regulations.
- Second** It seeks to ensure that activities conducted by Drexel in the United States and overseas relating to the export or re-export of U.S.-origin goods, services and technology comply with applicable export control laws and regulations.
- Third** It adopts procedures intended to ensure that no transfer of goods, services, or technology subject to export controls takes place beyond what is authorized by U.S. export control laws and regulations or by the terms of any export license or other approval granted by the U.S. government.
- Fourth** It ensures that any and all documentation completed is as accurate and complete as possible.
- Fifth** It sets out points of contact should any member of the Drexel community need assistance in complying with the laws and provides links to additional educational and resource materials for assuring compliance.

Compliance with the rules and procedures prescribed in this Handbook is the responsibility of all Drexel personnel, wherever located. Violations of export laws can result in severe criminal and/or civil penalties for Drexel and the individual(s) involved, as well as Drexel's loss of export and government contracting/funding privileges.

2.0 IMPORTANT DEFINITIONS

It is important to understand some of the principal definitions of terms used in this Handbook and in the export control regulations. Definitions of terms used in the Export Administration Regulations (EAR) are found at 15 C.F.R. Pt. 772. Definitions of terms used in the International Traffic in Arms Regulations (ITAR) are found at 22 C.F.R. Pt. 120.

“Export.” The term “export”, as used in the regulations has an expansive meaning. It includes not only the actual shipment or transmission of items subject to export controls (*i.e.*, the EAR or the ITAR) out of the United States but also the “release” of technology or software (including source code) to a foreign national in, or outside of, the United States. (A release of technology or source code to a foreign national in the United States is considered a “deemed” export.)

“Deemed Export.” The release of technology or software source code to a “foreign national” (defined below) in the United States, who is not a “green card” holder or U.S. citizen. Such a release is deemed to be an export to the country of which the foreign national is a citizen.

“Release.” Technology or software is “released” for export through: (i) visual inspection by foreign nationals of U.S.-origin equipment, facilities or documentation; (ii) oral or written exchanges of information in the United States or abroad; or (iii) the application to situations abroad of personal knowledge or technical experience acquired in the United States.

“Technology” means specific information necessary for the “development,” “production,” or “use” of a product. The information takes the form of “technical data” or “technical assistance.” Information that is generally accessible or available to the public is not “technology” subject to the EAR.

“U.S. Person.” Any individual who is a citizen of the United States, who is a lawful permanent resident alien of the United States or who is a “protected individual” as defined in 8 U.S.C. § 1324b(a)(3). It also means any corporation, business association, partnership, society, trust, or any other entity, organization or group that is incorporated to do business in the United States. It also includes any governmental (federal, state or local) entity. It does not include any foreign person.

- “Foreign national” means any person other than a U.S. citizen, a lawful permanent resident of the United States (i.e., a “greencard” holder), or a “protected individual” as defined in 8 U.S.C. § 1324b(a)(3) (e.g., refugees or persons seeking asylum).
- “Re-export” means the transfer of defense articles and defense services to an end-user, end-user or destination without the prior approval of the U.S. Department of State, Directorate of Defense Trade Controls (“DDTC”).
- “Technical Assistance” may take forms such as instruction, skills training, working knowledge, and consulting services. Technical assistance may involve the transfer of “technical data.”
- “Technical Data” includes information “required for” the design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of defense articles. It may take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, and read-only memories.
- “Use.” Operation, installation (including on-site installation), maintenance (including checking), repair, overhaul and/or refurbishing.
- “Knowledge.” Knowledge, and variants such as “reason to know” or “reason to believe,” includes not only positive knowledge that the circumstance exists or is substantially certain to occur, but also an awareness of a high probability of its existence or future occurrence. Such awareness is inferred from evidence of the conscious disregard of facts known to a person and also is inferred from a person’s willful avoidance of facts.
- “Development.” Development is related to all stages prior to serial production, such as: design, design research, design analyses, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, and layouts.
- “Defense Article.” Any item or technical data designated on the U.S. Munitions List (USML) 22 C.F.R. Pt. 121.1, as well as technical data recorded and stored in any physical form, models, mockups or other items that reveal “technical data” directly relating to items on the USML.
- “Defense Service.” The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad, in the design, development, engineering, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles or the furnishing to foreign persons of any technical data controlled by the ITAR.

“Production.” All production stages, such as: product engineering, manufacture, integration, assembly (mounting), inspection, testing, and quality assurance.

3.0 APPLICABLE U.S. LAWS AND REGULATIONS

Three principal U.S. regulatory regimes govern the export of items and technology to a foreign country or a foreign national.

Export Administration Regulations (U.S. Department of Commerce): *First*, the export of items or technologies that are commercial or “dual-use” in nature (*i.e.*, have both civil and military applications) is subject to the Export Administration Act of 1979 (“EAA”) (which has lapsed, but its substantive provisions are in effect through Executive Order), and its implementing regulations, the Export Administration Regulations (“EAR”), 15 C.F.R. Pt. 730 *et seq.* The EAA and the EAR are administered by the U.S. Department of Commerce, Bureau of Industry and Security (“BIS”). Items subject to the jurisdiction of BIS are listed on the Commerce Control List (“CCL”) found in the EAR.¹ The EAR include equipment, materials and a growing range of equipment, materials and software and the technology related to them used in research academic research. The complete text of the EAR and the CCL are available online at http://www.access.gpo.gov/bis/ear/ear_data.html. Printed versions of the EAR and CCL are available for review at the General Counsel’s office.

Scope of the EAR

Determining whether a license under the EAR would be required to export abroad or to a foreign national involves the consideration of two factors: (1) the classification of the item or technology within the CCL, and (2) the country of ultimate destination. (See Supp. No. 1 to 15 C.F.R. Pt. 774, and the “Country Chart” at 15 C.F.R. Pts. 738 & 742).

In general, the following items are subject to varying degrees of control under the EAR:

Items and technologies specifically identified on the Commerce Control List (“CCL”), which is set forth in 15 C.F.R. Part 774. (The CCL is the “master list” of all items and technology “subject to the EAR.”)

U.S.-origin items and technology that are not subject to the exclusive jurisdiction of another U.S. government agency and that are not

¹ The CCL covers such things as materials, chemicals, microorganisms, and toxins; materials processing; electronics; computers; telecommunications and information security; lasers and sensors; navigation and avionics materials; marine-related materials; and propulsion systems, certain space vehicles, and related equipment.

specifically listed on the CCL. (Such items and technology remain “subject to the EAR” and are classified as “EAR 99.”)

The CCL is divided into ten categories: (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. Each category contains five groups: (A) Equipment, Assemblies and Components; (B) Test, Inspection and Production Equipment; (C) Materials; (D) Software; and (E) Technology. Categories 1-6 are most likely to affect Drexel research.

Within each group, individual items are identified by an Export Control Classification Number (“ECCN”) consisting of a set of digits and a letter, e.g., 3A001. The first digit identifies the general category. The letter following identifies the group. The last three digits differentiate individual entries.

Classifying Under the EAR

The proper classification of each item is the initial step in determining whether there are any licensing requirements under the EAR. Drexel may choose to classify the items and technology, check with the manufacturers, or submit a classification request to BIS.

In order to determine whether the CCL requires a license for any given export or reexport, the first step is for the person most knowledgeable about the characteristics and capabilities of the item or technology to locate the ECCN (or subpart of the ECCN) on the CCL that most specifically describes the item or technology at issue. The easiest way to accomplish this is to contact the manufacturer. If that is not possible, the individual seeking to export the item shall classify the item with the assistance of the Office of Research Compliance and Administration (ORCA), as necessary.

In order to classify an item, you should begin by referring to the detailed index to the CCL, located at http://www.access.gpo.gov/bis/ear/ear_data.html. Next, you must verify the classification number by consulting the portion of the EAR that describes the item you are trying to classify. If you have confirmed that the description in the regulations accurately describes the item for export, you must determine the reason for the control. The reasons are listed in the relevant section of the EAR under the section heading, “License Requirements.” The final step is to consult the “Country Chart” found at Supplement No. 1 to EAR Part 738 to determine whether the reasons for control apply to the country of destination.

Exceptions to EAR

There are several categories of information that are explicitly exempted from the EAR. Types of information that would not be “subject to the EAR” include:

- (1) Publicly available technology and software that are generally accessible to the public in any form;
- (2) Information that arises during or results from “fundamental research;”
- (3) Information contained in certain types of patent applications; and
- (4) Educational instruction in a catalogue - listed course.

In addition, there are license exceptions contained in the regulations. The license exceptions are contained in part 740 of the EAR (15 C.F.R. §740). Note that not all license exceptions are available for all countries or nationals from all countries.

Fundamental Research Exception

There is an exception in the EAR that allows researchers to conduct certain research and share information with foreign nationals without seeking a license. Because Drexel is an educational institution, it qualifies for the fundamental research exception. The fundamental research exception is available for basic and applied research in science and engineering where resulting information is ordinarily published and shared broadly in the scientific community.

Under the EAR, the access and dissemination controls referred to in the regulations do *not* include prepublication reviews to prevent the inadvertent disclosure of proprietary information or to preserve patent rights. Other forms of prepublication review, however, could nullify the exemption. For example, prepublication reviews by corporate sponsors can nullify the exemption, other than for the above referenced reasons.

Nullification of the exemption could have serious consequences to research conducted by Drexel both for the researchers and for the university. For example, before foreign nationals could work on a project, the Drexel may need to secure a license, depending on the classification of the technology and the nationalities of those with access to the technology. In addition, Drexel would likely have to take steps to ensure that a foreign national could not access any documents or mailboxes on a computer system that contained controlled information unless Drexel had secured a license. Thus, before committing to a government, foundation or corporate sponsor that it may vet the results of your research or hold up publication to further its commercial purposes, you should contact a member of ORCA.

Patents

Information in patents and open (published) patent applications available at any patent office are in the public domain and thus is not subject to a license under the EAR. Information contained in a patent application, or an amendment, modification, supplement or division of an application, and authorized for filing under the license

provisions of 37 C.F.R. Part 5 from the Commissioner of Patents also does not require a separate license from the Commerce Department for export.

It is important to note that only the precise information contained in the patent or patent applications is free from restrictions under the EAR. Variations on that information, or the application of the information, may be controlled depending on the technology.

Other License Exceptions

In addition to these general exceptions, there are more specific exceptions that may be available depending on the item you intend to export. Although the combination of ECCN and ultimate destination may indicate that a license is required to export certain hardware, software, or technology to a certain destination, there are several “License Exceptions” that may be available depending on the details of the transaction, the item at issue, and its ultimate destination. Each ECCN will indicate whether certain License Exceptions are available, and details on all License Exceptions are provided in Part 740 of the EAR. If a license exception is available, and all of the requirements of the License Exception are satisfied, then a license is not required and the item/technology can be exported under the authority of that License Exception, provided no end-use/end-user restrictions apply. Please note, however, that the regulations require the exporters to retain documents for five years for any exports shipped pursuant to exceptions.

International Traffic in Arms Regulations (U.S. Department of State):

Second, the export of defense articles (*i.e.*, items or technology that are “inherently military” in nature but which also include many articles designed for intelligence and space-related purposes) as well as related technical data and services subject to the Arms Export Control Act of 1976, as amended, Pub. L. 90-629, 82 Stat. 1320 (1976) (“AECA”) and its implementing regulations, the International Traffic in Arms Regulations (“ITAR”), 22 C.F.R. Pt. 120 *et seq.* The AECA and the ITAR are administered and enforced by the U.S. Department of State, Directorate of Defense Trade Controls (“DDTC”). Items subject to the DDTC are listed on the U.S. Munitions List (“USML”) found in the ITAR, and include certain biological and toxicological agents.² Complete online versions of ITAR and the USML are available at:

http://www.pmdrtc.state.gov/regulations_laws/itar_official.html. Print versions of the ITAR and USML are available for review at the General Counsel’s office.

² The Munitions List covers not only clearly military items such as guns, armament and equipment but also protective personnel equipment, auxiliary military equipment (including cameras and cryptographic devices, software, and components), toxicological agents, certain other biological agents, spacecraft systems, nuclear weapons, and classified articles as well as technical data and services that relate to the enumerated categories.

Items and related technical data subject to the ITAR are set forth on the U.S. Munitions List (“USML”) found in Section 121.1 of the ITAR. Generally, the USML includes any military intelligence or defense-related hardware, software and technical data as well as some “space-qualified” hardware, software, technical data, and services suitable for use in space. It, however, also covers certain biological and chemical items.

Under the ITAR, an article may be designated by DDTC as a defense article if it is specifically designed, developed, configured, adapted, or modified for a military application, and: (i) it does not have predominant civil applications, and does not have performance equivalent (defined by form, fit and function) to those of an article or service used for civil applications; or (ii) it is specially designed, developed, configured, adapted, or modified for a military application, and has significant military or intelligence applicability such that control under the ITAR is necessary. The determination as to whether an item satisfies these conditions is based on the history of the development of the item and the environment (*i.e.*, civil, dual-use, or military) from which the item emerged, and *not* its intended end-use. The intended use of the item after its export (*i.e.*, for a military or civilian purpose) is not relevant in determining whether the article or service is subject to control under ITAR. Certain research related to bioterrorism or defenses against biowarfare, for example, may fall within the ITAR.

Given the complexities of the ITAR regulations, the likelihood that issues arising under the ITAR will have to be reviewed at the highest levels of Drexel, and the requirement that Drexel register with the DDTC before exporting most ITAR-regulated items, you should contact ORCA immediately if you believe that you are dealing with a defense item covered by the regulations. Submission of an Agreement to DDTC and/or approval by the relevant agencies of the U.S. Government generally takes months, so this approval process, as well as the internal review, should be factored in to any planning.

Office of Foreign Assets Controls (U.S. Department of the Treasury): *Third*, the Office of Foreign Assets Control at the U.S. Department of the Treasury (“OFAC”) regulates all transactions abroad with prohibited parties, such as terrorists and countries subject to U.S. embargoes (hereinafter, “prohibited end-users”). OFAC also enforces the Trading with the Enemy Act and various Executive Orders, which are executed through regulations at 31 C.F.R. §511 *et seq.* These regulations cover a range of activities such as foreign travel to OFAC-listed countries, sponsorships of symposia and other international activities, payments to foreign persons, and providing services or other items of value to OFAC-listed persons, entities or countries. Patent applications to countries subject to OFAC restrictions require either a specific or general license for prosecution and filing. If you intend to export any data in reliance upon this exemption, or if you seek patent protection in countries subject to OFAC sanctions, contact ORCA before proceeding.

Most of Drexel’s activities that may involve export control concerns involve items or technologies subject to the EAR. In some limited situations, the ITAR also may apply. The OFAC will apply to a range of Drexel transactions, travel and activities in certain countries or with certain entities. Moreover, before sharing items or technology

with a person or institution abroad, or with a foreign national at Drexel, we must ensure that the proposed recipients are permitted to receive the items. Consequently, this Handbook will address Drexel's compliance with all three regulatory regimes. Annex A provides links to the three regulatory regimes and other websites providing additional information on export controls.

4.0 PROHIBITED END-USES OR PROHIBITED END-USERS

Even if you have determined that no license is required under the EAR (and the ITAR) for export of an item, you must ensure that the export is not being sent to a prohibited end-user or being put to a prohibited end-use. End-user controls focus on the identity of the end-user. End-use controls focus on the known end-use of the item or technology.

Both end-user controls and end-use controls are addressed specifically in the EAR. These controls apply even if the applicable ECCN and country chart normally indicate that the export is not subject to licensing requirements. In addition, other government agencies maintain lists of individuals and entities with which we should not transact any business. For example, OFAC maintains a list of Specially Designated Nationals ("SDNs") and Specially Designated Terrorists ("SDTs"), and the DDTC maintains a list of "debarred" parties (*i.e.*, individuals and entities that have lost export privileges) with whom U.S. persons are prohibited from engaging in transactions. OFAC also maintains a list of countries that are subject to sanctions or embargoes. The current list is outlined in Annex E although you should follow the directions at Annex E to update the country list at the time of export as the OFAC sanctions change frequently.

4.1. Prohibited End-Users and Prohibited Destinations

Before exporting material or data to an individual entity, you must check the lists identified in Annex C, and request that ORCA perform a restricted party screen, using proprietary, third party software that ORCA is able to access under license. If the intended recipient appears on one of those lists, it is very likely that you will not be able to send the item to the intended recipient without, at a minimum, a license.

Currently, several countries are subject to at least some level of sanctions pursuant to regulations administered by the U.S. Department of the Treasury, Office of Foreign Assets Controls ("OFAC"). A current list of these countries is attached at Annex E. The Office of the General Counsel (OGC) shall be responsible for ensuring that the list of countries subject to OFAC sanctions (found in Annex E) is kept current.

It is Drexel's policy to comply with all requirements for transactions with individuals on any of the lists of prohibited end-users as well as the countries that are subject to U.S. unilateral or multilateral sanctions or embargoes. Thus, the approval of ORCA must be obtained in writing before any person retained or otherwise employed by Drexel can become involved, participate with, or have any dealings whatever in transactions involving any of the individuals on the lists at Annex C, the countries listed in Annex D, or nationals of the countries listed in Annex D that are not U.S. citizens or lawful permanent residents. The approval of ORCA shall be obtained by completing and submitting the form found at Annex C to ORCA.

4.2 Prohibited End-Uses

The EAR also prohibits U.S. persons from exporting goods, software, and technology with the "knowledge" that such items could contribute to the proliferation of weapons of mass destruction. Additional details about nuclear end-use controls, missile technology end-use controls, and chemical and biological weapons end-use controls can be found at Part 744 of the EAR. Guidance as to what constitutes "knowledge" of these restricted end-uses can be found under the "Know Your Customer" Guidance and Red Flags found in Supplement No. 3 to Part 732 of the EAR. The Red Flags are also listed in Annex D. If a project raises any red flags, then the Drexel official contemplating engaging in the project shall contact ORCA before proceeding further.

5.0 SHIPPER'S EXPORT DECLARATIONS AND DESTINATION CONTROL STATEMENTS

In addition to export control laws and regulations, it is Drexel's policy to comply with other requirements associated with exports of items or technology, including the filing of Shipper's Export Declarations ("SEDs"), when necessary, and Destination Control Statements.

5.1 SEDs

If the item you are shipping has a value of more than \$2,500, you will need to file an SED. This information frequently is on the international air waybills for commercial shippers such as Federal Express, DHL, UPS, and that these common carriers will generally prompt you to fill out the appropriate form. For assistance in filling out an SED, refer to <http://www.census.gov/foreign-trade/www/correct.way.html>, which will walk you through the process.

To determine the value in U.S. dollars, enter the selling price or cost if not sold, including freight, insurance, and other charges to U.S. port of export, but excluding unconditional discounts and commissions (nearest whole dollar, omit cents). The value to be reported on the SED is the exporter's price or cost if not sold, to the foreign party.

If there is an intellectual property agreement associated with the item to be exported, the value to be reported will depend on whether to value the item as the full

cost of the agreement or whether the cost of the agreement is for the services and intellectual property associated with the item, and the cost for the actual item is some subset of the total price of the agreement. The exact valuation will depend on the facts of the individual transfers. SED's generally are not required for e-mail transmissions or for transfers of software developed by Drexel. If the website noted above does not provide sufficient guidance for valuation purposes, contact ORCA for guidance.

5.2 Destination Control Statements

If the export is subject to the EAR, and is on the Commerce Control List and thus not classified as EAR 99, the invoice and the bill of lading, air waybill, or other export-control document that accompanies the shipment from its point of origin in the United States to the ultimate consignee or end-user abroad must, at a minimum, contain the following Destination Control Statement, as required under 15 C.F.R. § 758.6:

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

If the export is subject to the ITAR, the bill of lading, invoice, and license must include the following statement, as required under 22 C.F.R. § 123.9(b):

These commodities are authorized by the U.S. Government for export only to [country of ultimate destination] for use by [end-user]. They may not be transferred, transshipped on a non-continuous voyage, or otherwise disposed of in any other country, either in their original form or after being incorporated into other end-items, without the prior written approval of the U.S. Department of State.

6.0 ANTI-BOYCOTT PROVISIONS

U.S. law encourages, and in specified cases, requires U.S. persons and those in the U.S. to refuse to participate in foreign boycotts not supported by the U.S. The laws apply to all boycotts not sanctioned by the U.S. (including, for example, prohibitions on discrimination on the basis of race, religion, sex, national origin or nationality) but in practical terms, the laws primarily apply to the Arab League boycott of Israel.

U.S. law prohibits participation in an unauthorized boycott. Examples include:

- Agreements to refuse or actual refusal to do business with or in Israel or with blacklisted companies.
- Agreements to discriminate or actual discrimination against other persons based on race, religion, sex, national origin or nationality.

- Agreements to furnish or actual furnishing of information about business relationships with or in Israel or with blacklisted companies.
- Implementing financial instruments with prohibited boycott terms or conditions.

Under some cases, an organization must report the request to participate in a boycott. If you become aware of any potential boycott activity, complete the screen at Annex F and then contact ORCA immediately.

7.0 ACCESS TO CLASSIFIED TECHNOLOGY

There are also very stringent government rules and regulations concerning classified materials. Drexel adheres strictly to all applicable regulations and procedures related to classified information. Currently, Drexel does not engage in any research involving classified technology on campus. To the extent that Drexel may obtain access to classified technology, neither Drexel nor any of its employees or researchers shall release or disclose any classified technology to unauthorized persons including to foreign nationals. Also, Drexel employees or researchers shall not provide any foreign nationals access to classified technology.

8.0 INTERNAL COMPLIANCE STRUCTURE

All Drexel employees and researchers, and those acting on Drexel's behalf, are responsible for ensuring that Drexel conducts its activities in compliance with the requirements of U.S. export control laws and regulations and the rules and procedures set forth in this Handbook. (Annex B contains the Drexel Export Control Compliance Policy Statement.) It is particularly important for a globally-oriented research university like Drexel that frequently works with international researchers and collaborators to determine early in the process of any activity the potential requirement for export control authorizations. This requires full and timely disclosure of all relevant facts in a transaction in a clear, straightforward, and comprehensible manner.

ORCA shall oversee and be primarily responsible for Drexel's compliance with U.S. export control laws and regulations. ORCA shall coordinate with other Drexel offices, including OGC, as necessary. ORCA will be responsible for applying for and obtaining any licenses or other approvals that may be required, working in junction with Drexel's Empowered Official, Dr. Anthony Lowman. Any questions regarding compliance with export control laws and regulations or this Handbook shall be directed to the ORCA who will consult with OGC, the Empowered Official, and others as appropriate. A list of personnel in ORCA to contact regarding export control issues, including their contact information, is attached at Annex B as part of the Drexel University Policy Statement on export controls.

In particular, principal investigators shall have responsibility:

- to review and cooperate with ORCA as needed, prior to commencing any research, to determine whether their research is impacted by the controls or requirements contained within the export control regulations, and
- to re-evaluate, in cooperation with ORCA, that determination before changing the scope of the research or adding new staff to the project to determine if such changes alter the initial determination, and
- to make export control determinations far enough in advance to obtain any authorization that may be required.

Drexel will assist PIs in assessing the application of the export control regulations to their research and related activities, but primary compliance responsibility rests with the principal investigator of the research.

As required by law, OGC shall maintain a complete and current set of the EAR and the ITAR (and all other potentially relevant export control regulations) in the OGC office and shall make such regulations available to Drexel personnel who wish to consult them. OGC shall maintain a current version of this Handbook and shall be responsible for updating this Handbook as needed.

In accordance with the required State Department practice, all submittals and communication with U.S. licensing authorities regarding ITAR-related matters shall be made through ORCA by Drexel's Empowered Official, Anthony Lowman, Associate Vice Provost for Research. Any submission of licenses or communications to the Commerce Department or OFAC shall be through ORCA.

Any Drexel employee or researcher who seeks to export an item shall be responsible for performing the export licensing analysis for any potential Drexel export. A checklist and related materials, including instructions, to assist the employee in determining whether an export license is required for a potential transaction is attached at Annex C to this Policy.

9.0 TRAINING

It is Drexel's policy to educate its key researchers and employees regarding the basic requirements for complying with, U.S. export control laws and regulations, as well as the consequences for failure to comply.

10.0 INTERNAL REVIEWS

ORCA shall have the responsibility for facilitating the auditing of the compliance of various divisions within Drexel with the rules and procedures set forth in this Policy in a manner and at a frequency as deemed necessary.

Drexel personnel with supervisory authority are encouraged periodically to review the export control compliance activities of those under their supervision.

11.0 RECORDKEEPING

An essential element of this Policy is to ensure that Drexel export control documents are maintained in an accurate and consistent manner and are available for inspection by U.S. government agencies with export licensing jurisdiction.

Generally, Drexel is required to retain certain types of documents related to export transactions for a period of five (5) years from the later of the date that the transaction ended or the licensed activity was complete. Furthermore, Drexel must make those documents available to the U.S. government agencies administering export controls upon request.

ORCA shall establish a centralized recordkeeping system for maintaining the records that Drexel is required to maintain including, as appropriate, procedures for retaining documents in individual offices. A detailed description of the types of documents and records that are required to be maintained can be found in 15 C.F.R. Pt. 762 and 22 C.F.R. Pt. 122.5.

12.0 VIOLATIONS, REPORTING AND AUDIT

The penalties for violating the export control laws are severe. Violations can result in substantial criminal and civil penalties for both the individual involved in the violation (*e.g.*, fines of up to \$250,000 per violation or imprisonment for 10 years) and substantial fines and penalties for Drexel. Violations also can result in the loss of export privileges for Drexel or for individuals involved in the violation. Failure to comply with the requirements of U.S. export control laws and regulations, and the provisions contained in this Policy, are also grounds for disciplinary action, up to and including termination of employment.

If any Drexel employee or students become aware that a violation or possible violation of U.S. export control laws or regulations has occurred, or is about to occur, he or she must immediately to report the details of the suspected violation directly to OGC. Alternatively, violations or possible violations can be confidentially reported to the toll free compliance hotlines for Drexel University at (866) 358.1010 – or – the College of Medicine at (866) 936.1010.

OGC has the authority to stop, and shall stop, any proposed transaction by Drexel that in the judgment of OGC, could result in a violation of U.S. export control laws or regulations by Drexel or anyone in the Drexel community. Any Drexel employees involved in a transaction stopped by OGC shall cooperate by providing information about the transaction at issue and shall take no further action with respect to the transaction

until an internal investigation of the suspected violation is conducted as described below, and the written authorization to proceed with the transaction is obtained.

OGC shall investigate any suspected violations, working in conjunction with outside export control counsel as needed. If OGC determines that an export control violation has occurred, OGC shall inform the Drexel administration of the facts surrounding the violation and provide their recommendations for what actions Drexel should take in response to the violation. From time to time, OGC may audit the Drexel export control authorizations and procedures.

Annex A

List of Websites Containing Additional Information on Export Controls

<u>Bureau of Export Administration</u>	www.bis.doc.gov
Denied Persons List	www.bis.doc.gov/DPL/Default.shtm
Entity List	www.bis.doc.gov/Entities/Default.htm
Unverified List	www.bis.doc.gov/Enforcement/Unverified List/unverified_parties.html
EAR Regulations Online	http://www.access.gpo.gov/bis/ear/ear_data.html
<u>Office of Foreign Assets Controls</u>	www.ustreas.gov/offices/eotffc/ofac
List of Specially Designated Nationals and Blocked Persons	http://www.treas.gov/offices/enforcement/ofac/sdn/index.shtml
<u>Directorate of Defense Trade Controls</u>	http://www.pmddtc.state.gov/
List of Debarred Parties	http://www.pmddtc.state.gov/compliance/debar.html
<u>Department of Defense</u>	www.defenselink.mil/
Technology Security Administration	http://policy.defense.gov/sections/policy_offices/dtsa/index.html
<u>U.S. Customs and Border Protection</u>	http://www.cbp.gov/
<u>Department of Energy</u>	www.doe.gov
<u>Nuclear Regulatory Commission</u>	www.nrc.gov
<u>Food and Drug Administration</u>	www.fda.gov
<u>U.S. Government Printing Office</u>	www.gpoaccess.gov

Annex B

Drexel Export Control Compliance Policy Statement

Drexel engages in research and educational activities that may involve the development or use of products, goods, hardware, software or materials (collectively, “items”) or technology that may be subject to U.S. export control laws and regulations. The U.S. government increasingly is focused on the compliance of non-profit research institutes and universities with these laws and regulations. Drexel is committed to complying with all applicable export controls, as established by the federal regulations described below. As a result of the severe criminal and civil penalties for noncompliance by Drexel and by individual researchers at Drexel, it is critical that everyone in the Drexel community understands these rules and complies with them fully. Violations also can put at risk Drexel's research and international activities, and those of its Principal Investigators and lead to loss of research funding.

The export control rules are highly complex. The export control regulations and lists maintained by the U.S. Department of Commerce (EAR); the U.S. Department of State (ITAR), and the U.S. Department of the Treasury (OFAC) change frequently and are subject to agency interpretation.

In general, export control regulations apply to:

- the transfer, or “export” of specified items or technology (e.g., products, materials, or software) outside the United States;
- the disclosure of certain information to certain foreign nationals inside the United States (“deemed export”);
- the training or offering of services involving controlled equipment or information to foreign nationals;
- the design or production of items related to defense services;
- transactions with, or providing services to, certain foreign countries or individuals who are on embargo or restricted lists;

In order to assist you in recognizing situations that should be carefully reviewed to determine whether export controls apply, we have designed a Drexel Export Control Handbook to help guide you. In addition, faculty and staff can access a compliance questionnaire to help make export control law initial determinations and to guide your initial reviews. Both of these resources are available at the Office of Research website at http://www.research.drexel.edu/administration/Compliance/Export_Controls.aspx. In addition, we will continue appropriate education and training programs on an on-going basis. **If, upon using the Handbook, you identify a situation requiring further review, or you believe an export license or other approval may be required, please contact promptly**

Julie Ford

ORCA Compliance

Phone: 215.895.2947

jjf47@drexel.edu

The export control regulations have become more prominent, and scrutiny concerning the level of compliance by non-profit research institutes and universities with these regulations continues to increase. It is very important that faculty and other researchers throughout Drexel understand their obligations under these regulations and adhere to them strictly.

Annex C

Instructions for Export Control Compliance Questionnaire

Drexel engages in research and educational activities that may involve the development or use of products, goods, hardware, software, materials or technology that may be subject to U.S. export control laws and regulations. The U.S. government increasingly is focused on the compliance of universities with these laws and regulations. Drexel is committed to complying with all applicable export controls, as established by the applicable federal regulations. As a result of the severe criminal and civil penalties for noncompliance by Drexel and by individual researchers at Drexel, as well as possible threats to national security, it is critical that everyone in the Drexel community understands these rules and complies with them fully.

This questionnaire will walk you through a series of "Yes" or "No" questions, leading to a determination of whether or not an export control concern may be applicable to any particular situation. Be aware that export controls may apply when an item, information or software is being sent or taken (e.g. traveling with a laptop) outside US borders, OR when it is being shared with "foreign persons or entities" in the US, **including Drexel faculty, staff, and students working on campus.**

A "foreign person" is anyone who is not a "US person." A US person is a citizen of the United States, a lawful permanent resident alien of the US (a "green card holder"), a refugee, protected political asylee or someone granted temporary residency under amnesty or Special Agricultural Worker provisions. The word "person" includes organizations and entities, such as universities. The general rule is that only US persons are eligible to receive export controlled items, information or software without first obtaining an export license from the appropriate agency.

This questionnaire uses terminology derived from the regulations of the US Departments of State, Commerce and Treasury. These questions ask about **sharing, shipping, transmitting or transferring any items, information or software**. Violations of these export control regulations can lead to significant civil and criminal penalties.

- ITEMS refer to any **tangible things, equipment or hardware**.
- INFORMATION can include **technical data** such as models, formulae, engineering designs and specifications, or **technical assistance** such as training or instruction.
- SOFTWARE refers to a collection of one or more **computer programs or microprograms** in either **source code** (programming statements) or **object code** (machine-readable instructions).

You are required to answer all questions on the Export Control Compliance Questionnaire. Please find the attached footnotes for your reference as you complete the questionnaire. As you go through these questions, you may have additional questions of your own. If so, please contact Julie Ford, at 215-895-2947 or jjf47@drexel.edu



Office of Research Compliance and Administration Export Control Compliance Questionnaire

Principal Investigator: _____

Project Title: _____

Sponsor: _____

Drexel University is committed to maintaining strict compliance with all US Export Control regulations.
You must read the attached instructions prior to completing all of the questions below.

Drexel's Export Control Policy Statement and Handbook can be accessed here:
http://www.research.drexel.edu/administration/Compliance/Export_Controls.aspx.

Severe criminal and civil penalties for individual researchers and Drexel University may be imposed for export control violations.

Begin each question with:

Are you sharing, shipping, transmitting or transferring an item, information or software (including but not limited to encryption software(1))...

		Yes	No	ORCA only
1	that you know or have any reason to believe will support the design, development, production, stockpiling or use of a nuclear explosive device, chemical or biological weapons, maritime nuclear propulsion end use, or missiles?			
2	developed under a sponsored agreement imposing publication restrictions beyond a brief review (up to 90 days) for patent protection and/or inadvertent release of confidential/proprietary information?			
3	that an external sponsor, vendor, collaborator or other third party has provided to you under a Non-Disclosure Agreement or under a Confidentiality Agreement?			
4	that is a defense article(2) and/or on the ITAR US Munition List (USML) at http://www.pmdtc.state.gov/regulations_laws/documents/consolidated_itar/2009/Part_121.pdf or that is technical data(3) subject to ITAR?			
5	that appears on the Commerce Control List (CCL)(4) at http://www.access.gpo.gov/bis/ear/ear_data.html of the Export Administration Regulations (EAR)(5)?			
6	or anything of value to an entity in a country subject to US economic or trade sanctions (please see: http://www.ustreas.gov/offices/enforcement/ofac/programs/) or identified by the US Department of State as a "State Sponsor of Terrorism," namely Iran, Cuba, Sudan, or Syria?			

IMPORTANT: IF YOU ANSWERED YES TO ANY OF THE QUESTIONS ABOVE, THERE MAY BE AN EXPORT CONTROL CONCERN RELATED TO YOUR PROPOSED ACTIVITY AND A LICENSE MAY BE REQUIRED. PLEASE CONTACT JULIE FORD IN ORCA IMMEDIATELY FOR FURTHER ASSISTANCE AT 215.895.2947 OR JULIA.J.FORD@DREXEL.EDU.

RESTRICTED PARTY SCREENING: In addition to the areas covered above, and by order of the United States government and its export regulations, U.S. individuals and companies are restricted or prohibited from exporting or providing services of any kind to any party contained in U.S. government export denial, debarment, and blocked persons lists. You must provide the names of individuals and companies that you may be working with in connection with your research or other activities on the next page, in order for ORCA to perform the required check.

Signature: _____

Principal Investigator: _____ Date: _____

RESTRICTED PARTY SCREENING LIST

Principal Investigator: _____

Department: _____

Potential Sponsor: _____ Solicitation Attached: Yes / No

In the spaces below, please provide a list of the organizations or companies (including any subcontractors or independent contractors) as well as any individuals (internal or external to Drexel) with whom you will be collaborating or otherwise working on this research project so that ORCA can perform the required restricted party screening check.

For your protection and that of the University, ORCA will screen against relevant U.S. Government lists that prohibit certain transactions with certain organizations and individuals, including Specially Designated Nationals and Blocked Persons (SDN) lists, under the authority of (among others):

- Department of Treasury Office of Foreign Assets Control (OFAC) Sanctions
- Department of Commerce Bureau of Industry and Security (BIS) Denied Persons List
- Department of Commerce BIS Entity List and Unverified List
- Department of State Arms Export Control Act Debarred Parties
- Department of State Designated Terrorist Organizations
- Department of State Nonproliferation Orders

Organizations (and address, if known) to be involved in the Sponsored Project:

1. _____
2. _____
3. _____
4. _____
5. _____

Name and citizenship of all individuals participating in the Sponsored Project:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Use additional sheet if needed to accommodate more organizations or personnel.

Export Control Questionnaire Footnotes

Note (1)

The sharing, shipping, transmission or transfer of almost all encryption software in either source code or object code is subject to US export regulations. Even most publicly available "dual-use" encryption code captured by the Export Administration Regulations (EAR) requires the availability of a License Exception. A License Exception under the EAR is an authorization based on a set of criteria, which when met, allows the exporter to legally circumvent export licensing requirements. Please contact Julie Ford at 215-895-2947 or by email at jjf47@drexel.edu to help determine if an exception applies to your situation.

In addition, US persons are prohibited without prior authorization from providing technical assistance (i.e., instruction, skills training, working knowledge, consulting services) to a foreign person with the intent to assist in the **overseas** development or manufacture of encryption software that is subject to US Government notification or authorization. This prohibition does **NOT** limit Drexel personnel from teaching or discussing general information about cryptography or developing or sharing encryption code within the United States that arises during, or results from, fundamental research.

Note (2)

A defense article:

1. Is specifically designed, developed, configured, adapted, or modified for a military application, and
 1. does not have predominant civil applications, and
 2. does not have performance equivalent (defined by form, fit and function) to those of an article or service used for civil applications;
2. Is specifically designed, developed, configured, adapted, or modified for a military application, and has significant military or intelligence applicability; or
3. Is on the [US Munitions List](#) (USML, the US State Department ITAR list).

Note (3)

Technical data means:

1. Information, other than software, 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 directly related to defense articles.

"Technical data" does NOT include information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities, information in the public domain, or information generated in the course of performing fundamental research. It also does not include basic marketing information on function or purpose or general system descriptions of defense articles.

Note (4)

The Commerce Control List (CCL) is maintained by the Bureau of Industry and Security (part of the US Department of Commerce) as part of the Export Administration Regulations (EAR). This list is sometimes called the "dual use" list, as the items on it may have either a military or commercial application.

Note (5)

The EAR defines "technology" as:

- Specific information necessary for the "development", "production", or "use" of equipment or software. Technology includes information subject to the EAR released in the form of technical assistance or technical data.
 - Technical assistance includes instruction, skills training, working knowledge, consulting services. Technical assistance may involve transfer of export controlled information.
 - Technical data includes blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

Information that is, or will be, placed in the public domain, such as that generated by fundamental research, is not subject to the EAR and is exempt from export control regulations.

The EAR defines software code as a collection of one or more programs or microprograms fixed in any tangible medium of expression. Software code is comprised of source code or object code:

Source Code: A convenient expression of one or more processes that may be turned by a programming system into equipment executable form ("object code" or object language).

Object Code: An equipment-executable form of a convenient expression of one or more processes ("source code" or source language) that has been converted by a programming system.

Annex D

“Red Flags” Indicating Possible Diversion

- The recipient or its address is similar to one of the parties found on the Commerce Department's Bureau of Industry and Security's list of denied persons.
- The recipient or agent is reluctant to offer information about the end-use of the item.
- The product's capabilities do not fit the recipient's line of business, such as an order for sophisticated computers for a small bakery.
- The goods, software or technology sought is incompatible with the technical level of the country to which it is being shipped, such as semiconductor manufacturing equipment being shipped to a country that has no electronics industry.
- The recipient is willing to pay cash for a very expensive item when the terms of sale would normally call for payments over time.
- The recipient has little or no background in the field associated with the export.
- The recipient is unfamiliar with the product's performance characteristics but still wants the product.
- Routine installation, training, or maintenance services are declined by the recipient.
- Delivery dates are vague, or deliveries are planned for out of the way destinations.
- A freight forwarding firm is listed as the export's final destination.
- The shipping route is abnormal for the product and destination.
- Packaging is inconsistent with the stated method of shipment or destination.
- When questioned, the recipient is evasive and especially unclear about whether the purchased product is for domestic use, for export, or for reexport.

Note that some indicators may not be relevant depending on the technology for export

Annex E

Countries Subject to OFAC Sanctions

The following is a list of countries that presently are subject to at least some level of sanctions under the regulations of the U.S. Department of the Treasury, Office of Foreign Assets Controls (“OFAC”) found at 31 C.F.R. Ch. V. The most recent information about the nature and scope of OFAC sanctions regulations can be found at the OFAC website at www.ustreas.gov/offices/eotffc/ofac.

Total Embargo

1. Cuba. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/cuba/cuba.shtml>
2. Iran. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/iran/iran.shtml>
3. North Korea (officially known as the “Democratic People’s Republic of Korea” or “DPRK”). Note that some exports may be possible with the proper license. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/nkorea/nkorea.shtml>
4. Sudan. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/sudan/sudan.shtml>
5. Syria. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/syria/syria.shtml>

Partial Embargo.

The following countries are subject to at least some form of restriction by OFAC. A summary of the restrictions is noted below. The restrictions are highly fact specific and no exports should be made to these countries without confirming that the regulations do not restrict a particular export. Links to information sheets about the sanctions are noted below.

1. Balkans / Former Yugoslavia
 - Sanctions apply only to dealings with persons designated on OFAC’s list of Specially Designated Nationals (SDNs). For more information, see: <http://www.ustreas.gov/offices/enforcement/ofac/programs/balkans/balkans.shtml>
2. Belarus – for more information see: <http://www.ustreas.gov/offices/enforcement/ofac/programs/belarus/belarus.shtml>
3. Burma (Myanmar)

- Sanctions apply to the following: export of financial services to Burma or other investment in Burma; and the property interests of the Government of Burma and other designated entities. The importation of products of Burma is also prohibited. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/burma/burma.shtml>

4. Iraq

- Most sanctions have been lifted except with respect to dealings with the former regime. Exports of Commerce-controlled items to Iraq are subject to special controls found at Part 746.3 of the Export Administration Regulations at 15 C.F.R. §746.3. For more information, see: <http://www.ustreas.gov/offices/enforcement/ofac/programs/iraq/iraq.shtml>

5. Liberia

- Transactions involving close associates of Charles Taylor and his family and former government and their property are generally prohibited. For more information, see <http://www.ustreas.gov/offices/enforcement/ofac/programs/liberia/liberia.shtml>

6. Libya

- Most sanctions have been lifted although export controls on items on the Commerce Control List remain largely in place. For more information, see <http://www.bis.doc.gov/policiesandregulations/libyafaqs.htm#2>

6. Zimbabwe

- Transactions involving property of the Mugabe regime and/or other individuals listed on the SDN list are prohibited. <http://www.ustreas.gov/offices/enforcement/ofac/programs/zimbabwe/zimb.shtml>

Annex F

Anti-boycott Compliance Screen

COMPANY/CONSIGNEE NAME: _____
DESTINATION: _____
SCREEN PERFORMED BY: _____
DATE OF SCREEN: _____

1. Has anyone in the transaction, for reasons of anti-boycott compliance, agreed to refuse or actually refused to do business with Israel or with blacklisted companies?

Yes No
2. Does anyone in the transaction, for reasons of anti-boycott compliance, have agreements to discriminate or does it actually discriminate against other persons based on race, religion, sex, national origin, or nationality?

Yes No
3. Has Drexel been required or requested by a foreign person to furnish information about Drexel's business relationships with Israel or with blacklisted companies?

Yes No
4. Has Drexel been required or requested to furnish information about race, religion, sex or national origin of any person?

Yes No
5. Do any third-party documents require that Drexel take boycott-related actions prohibited by the anti-boycott regulations?

Yes No

If any of the above questions are answered affirmatively, do not proceed with export. Contact ORCA immediately. Drexel may be required by law to report solicitations to participate in boycotts, even if Drexel rejects the request.