EXPORT CONTROLS

- Several federal agencies regulate exports, including
  - State (national security) – the ITAR
  - Commerce (trade controls) – the EAR
  - Energy (special nuclear materials, nuclear weapons)
  - Treasury (money, gold, silver, etc.)
The Most Relevant Regulators

EAR
US Department of Commerce
- The Export Administration Act of 1979 -- implemented by the Export Administration Regulations

ITAR
US Department of State
- The Arms Export Control Act -- implemented by the International Traffic in Arms Regulations
Of Current Concern:

- The State Department’s
  International Traffic in Arms Regulation
  22 CFR 120 et seq; www.pmdtc.org/reference.htm#ITAR
  
  - Currently affecting space-based and satellite-reliant research
  - The primary focus of this discussion
WHAT ARE EXPORT CONTROLS?

The shipment outside our borders of certain specified goods and technologies must be authorized through the issuance of an export license or other authorization. The disclosure by almost any means of certain information -- to foreign nationals, whether in the U.S. or abroad -- may also require an export license or authorization.

- ITAR, however, does not make visual access of controlled technology by a foreigner in the U.S. an “export”
- EAR does treat visual access of controlled items as “export”
A FEW BASIC I.T.A.R. DEFINITIONS

- FOREIGN PERSON is an individual of non-U.S. origin who is neither a citizen, a permanent resident alien, or of other protected status (22 CFR 120.16)

- EXPORT is the release or disclosure of controlled technology or data to a foreign national, whether here or abroad (22 CFR 120.17)
  - “Deemed Export” takes place within the U.S.

- TYPICAL “Deemed” EXPORTS:
  - web posting of export controlled information
  - International scientific exchanges/collaborations regarding controlled data or technology
  - attendance of foreign nationals at conferences involving export controlled technology or data
What does it mean to EXPORT?

SHIP to

TALK to

WORK with

FOREIGN COUNTRIES & NATIONALS
“Technical Data” and “Defense Article”

- Technical Data is just about any information pertaining, in any way whatsoever, to a Defense Article.
  - This definition does not include information in the public domain, basic marketing information, or information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities. (22 CFR 120.10)

- A Defense Article is ANYTHING on the Munitions List (22 CFR 120.6)
What is Technical Data? continued....

Under ITAR = “inherently military in character”

1) Classified information relating to defense articles and defense services

2) Items that appear on, or are closely related to, the U.S. Munitions List

3) Information covered by an invention secrecy order

4) Information directly related to the design, engineering, development, production, processing, manufacture, use, operation, overhaul, repair, maintenance, modification or reconstruction of defense articles.
⋆ ITAR of current concern to academe

- recent changes affect unclassified, non-secret space-based or satellite-related fundamental research

- Expansive definitions ignore “inherently military” requirement

- Chilling effect on informal scientific exchanges
What changes?

  - Amended the Munitions List (22 CFR 121)
    - Commercial Communications Satellites
    - Research, Scientific, Experimental Satellites
    - AND associated equipment, related systems, and payloads
  - Previously on Commerce Dual Use List
    - Preponderantly civilian use
    - Specifications in the Public Domain
So What?

- Articles on the Munitions List may not be exported without a license
  - Licenses impose access, dissemination, and participation restrictions
    - International academic collaborations
    - Foreign student and researcher participation
    - Global sharing of research data
- Enormous impact on unclassified public domain space-based or satellite reliant research
WHY WORRY?

- Control over the dissemination of “technical data” -- limits freedom to publish and talk about research

- Restrictions on access of information by foreign nationals (including faculty, students & postdocs) – could prohibit foreign nationals from working on projects

- Restrictions on visas to foreign visitors & collaborators – could prohibit foreign visitors or collaborators to visit laboratory

- Restrictions on publications of research results – could impose time delays, reviews and approvals
Why Worry? Continued.....

- Restrictions on attendance at conferences and seminars -- prohibits presentation of results or discussions of projects to audiences where there are foreign nationals or at international conferences abroad

- Restrictions on the export of dual-use goods and technologies
  - Scientific satellite hardware and related technologies

- Control of the export of “technical data” to a foreign national regardless of whether the foreign national is in the U.S. or abroad

- Requirements for fingerprinting or answering security questionnaires
What To Do?

Exclusions,
Exemptions,
Exceptions
INFORMATION NOT SUBJECT TO ITAR

- Information in the Public Domain
  (22 CFR 120.11)
  - Information published and generally accessible to the public in any form:
  - Information published in books, periodicals, magazines (electronic or hardcopy)
  - Information released at symposia, seminars, conferences, workshops, etc.
INFORMATION NOT SUBJECT TO ITAR:

- **Fundamental Research**
  - Basic and applied research in science and engineering, the results of which are ordinarily published and shared broadly within the scientific community
    - distinguished from proprietary research and from industrial development, design, production, manufacture and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.
    - Research subject to access, dissemination, or participation restrictions does not qualify!
BASIS FOR THE FUNDAMENTAL RESEARCH EXCLUSION

- **National Security Decision Directive 189**
  
  Fundamental Research defined: basic and applied research in science and engineering, the results of which are available to the interested scientific community
  
  - National Policy: No restriction may be placed upon the conduct or reporting of federally funded Fundamental Research that has not received national security classification
  
  - Research with access, dissemination, or participation restrictions does not qualify as Fundamental Research

- Stanford’s “Openness in Research Policy” precludes acceptance of research conditioned on access, dissemination, participation restrictions.

*Executive Order 12356 (1985) [www.epic.org/open_gov/eo_12356.html](http://www.epic.org/open_gov/eo_12356.html)*
(ITAR recognizes the Fundamental Research Exclusion (22 CFR 120.11(8)))

(State Department recently formally announced that it does not regulate Fundamental Research (67 Federal Register 15099, 29 March 2002))
Keep it Fundamental – Keep it in the Public Domain

Fundamental research & fundamental data are EXCLUDED from Export Control Regulations

Fundamental research defined.....

“Basic and applied research in science and engineering, where the resulting information is ordinarily published and shared within the scientific community”
Stanford Accepts ONLY Fundamental Research Projects
Stanford’s Office of Research Administration

**SCREENS** all incoming research opportunities in order to be able to decline projects carrying disclosure restrictions

**BEWARE**
- Participation, Access, and Dissemination Restrictions
  - Prepublication reviews
  - U.S. citizen only meetings
  - Classified, Proprietary or otherwise Secret work
  - Other “national security” controls
REPEAT: Acceptance of participation, dissemination, and access restrictions sought by the government or other sponsor may destroy a university’s ability to characterize its work as “Fundamental Research” 22 CFR 120.11(8)(i) and (ii)
  - Licenses then required for international collaborations, researching involving foreign students, etc.

NEGOTIATE
  - Demonstrate PUBLIC DOMAIN nature of work
  - Point to the Registration Exemption
  - Offer Alternative Clauses
    ▪ will abide by *applicable* law
REGISTRATION EXEMPTION

- The ITAR provides that registration with Office of Defense Trade Controls (a prerequisite to licensing) is not required for “persons” (a definitions that includes any entities authorized to do business in the U.S.) who
  - engage only in the fabrication of articles
  - “for experimental or scientific purposes,
  - including research and development.”
  22 CFR 122.1(b)(4)
THE REAL PROBLEM:
export-controlled information held by third parties

- Vendors, Collaborators and Subcontractors on Space-Based Research May Possess Controlled Data Needed by Stanford
  - Honeywell, TRW, Lockheed, Orbital, and even JPL
  - Interface and assembly information is ITAR-controlled
    - "Technical Data"
      - Mating the experimental device to the vendor’s equipment or component
      - May be a “defense service” on the part of the vendor (requiring a license)

- Now what?
OPTIONS

- Is an Exemption, Exception, or Exclusion Available under the export regulations?

- Is the needed information “substantially remote from the intellectually significant portions of the work” so that a NonDisclosure Agreement between the Discloser and the Recipient will not violate Stanford’s Openness in Research Policy?
POSSIBLE EXEMPTIONS

University Employee Exemption – 22 CFR 125.4(b)(10)

- Foreign nationals may be eligible to have access to a third party’s controlled data if
  - Citizen or Green-Card Holder or
  - A bona fide full-time regular employee of
  - an institution of higher education
    - working for the University and eligible to work in the U.S. because they are a Permanent Resident Alien or have an H1B visa)
(Possible Exemptions, con’t)

- The “University Exemption” for space-based fundamental research - 22 CFR 125.4(d)
  - Accredited U.S. institutions of higher education are exempt from this licensing requirement when
    - Foreigners are nationals from EU, NATO, or Strong Non-NATO countries
    - engaged in fundamental research under aegis of accredited US university
    - In direct support of fundamental research AND
    - Concerning only assembly and/or integration of a controlled article into a scientific, experimental, or research satellite (no launch information) **BUT**
RELEASE PERMITTED ONLY IF

- The information to be disclosed under 125.4(b)(10) satisfies the requirements of 22 CFR 123.16(b)(10):
  - All the information about the article, including its design, “will be published and shared broadly within the scientific community, and is not restricted for proprietary reasons or specific U.S. government access and dissemination controls or other restrictions accepted by the institution or its researchers on publication of scientific and technical information resulting from the project or activity”
- In other words, only Public Domain information
The Restriction Eviscerates the Exemption

- State intended to aid universities
- ITAR by its terms does not control public domain information
- None of the Third Party data at issue would be in the public domain (that is the heart of the problem)
- WHY develop and publish a regulation that permits only the sharing of public domain information?
NONDISCLOSURE AGREEMENTS

A NonDisclosure Agreement Is Permissible If

- Export Controlled Data or Items
  - Generated by a third party, not the University
  - Substantially remote from the intellectually significant portions of the research
  - Lack of access will not disadvantage other researchers or otherwise impair their ability to achieve their academic and scientific goals

- University Recipient is Eligible under Export Regulations
  - No Export License needed for the disclosure of the needed information or technology to the University recipient by the third party

- University Recipient signs as an Individual, with Personal Liability