VUMC Export Compliance

Export-Controlled & Restricted <u>Fungi</u>

Fungi

- Bipolaris oryzae (Cochliobolus miyabeanus, Helminthosporium oryzae);
- Coccidioides immitis;
- Coccidioides posadasii;
- Colletotrichum kahawae (Colletotrichum coffeanum var. virulans);
- Magnaporthe oryzae (Pyricularia oryzae);
- Microcyclus ulei (syn. Dothidella ulei);
- Puccinnia graminis ssp. graminis var. graminis/Puccinia graminis ssp. graminis var. stakmanii (Puccinia graminis [syn. Puccinia graminis f. sp. tritici]);
- Puccinia striiformis (syn. Puccinia glumarum);
- Peronosclerospora philippinensis (Peronosclerospora sacchari);
- Phoma glycinicola (formerly Pyrenochaeta glycines)
- Sclerophthora rayssiae var. zeae;
- Synchytrium endobioticum;
- Thecaphora solani;
- Tilletia indica

Vaccines & Immunotoxins

- Vaccines against items above;
- Immunotoxins containing items above;
- Medical products containing toxins (e.g.botulinum toxin, conotoxin, etc.)
- Diagnostic and food testing kits containing items above

NOTE: <u>Genetic elements</u> or <u>Genetically Modified Organisms</u> from any of the categories above are also controlled.

"Genetic Elements" include, inter alia, chromosomes, genomes, plasmids, transposons, vectors, and inactivated organisms containing recoverable nucleic acid fragments, whether genetically modified or unmodified, or chemically synthesized in whole or in part. For the purposes of this ECCN 1C353, nucleic acids from an inactivated organism, virus, or sample are considered to be 'recoverable' if the inactivation and preparation of the material is intended or known to facilitate isolation, purification, amplification, detection, or identification of nucleic acids.

"Genetically Modified Organisms" include organisms in which the nucleic acid sequences have been created or altered by deliberate molecular manipulation.

***** Such materials are controlled regardless of quantity or attenuation. *****

Of utmost concern are materials that could either represent a significant hazard to human, animal, or plant health or those materials that have been modified to endow or enhance the pathogenicity of the target. 'Endow or enhance pathogenicity' is defined as when the insertion or integration of the nucleic acid sequence or sequences is/are likely to enable or increase a recipient organism's ability to be used to deliberately cause disease or death. This might include alterations to, inter alia: virulence, transmissibility, stability, route of infection, host range, reproducibility, ability to evade or suppress host immunity, resistance to medical countermeasures, or detectability.