

## Stockton Will Send Spores to Space to Find Out If Fungus Can Aid Agriculture Beyond Earth

Student Experiment Selected to go to the International Space Station by

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**Galloway, N.J.** – On Earth, some plant roots and fungi form mutualistic relationships, known as mycorrhizae, that result in increased plant growth. Stockton University students designed an experiment to determine if the same holds true in a microgravity environment, where gravity is nearly absent.

Long-term space travel and the need for astronauts to sustain their food supply in space, led students Danielle Ertz and Valkyrie Falciani with faculty mentor Tara Luke, associate professor of Biology, to study fungus as a potential force for improving agriculture in space. Their experiment, “Spores in Space: The Effects of Microgravity on Endomycorrhizae,” was chosen by the National Center for Earth and Space Science Education (NCESSSE) to go to the International Space Station (ISS) as part of Mission 11 of the Student Spaceflight Experiments Program (SSEP).

During the upcoming spring semester, Ertz, a senior Biology major from Woodlynne, N.J., and Falciani, a Hammonton resident and Marine Biology graduate now in the Teacher Education program, will prepare their experiment for transport to the ISS aboard the Space X Dragon, a free-flying spacecraft.

Their experiment uses a mycorrhizal fungus species and flax. Flax was chosen because its seeds are edible, the plant can be used to make cloth, its extensive taproot system allows growth in limited space and it is proven to grow in space.

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“This is a way for students to get a taste of the authentic scientific process, which is the heart of our general studies courses in science, showing them how scientists think and work,” Straub added.

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