ISU still plans GMO banana trial, despite controversy

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(Photo: Queensland University of Technology/Special to the Register)

lowa State University researchers plan to move ahead this year with a longdelayed project in which a dozen students would be paid to eat genetically modified bananas.

The trial is controversial, because natural-food proponents claim genetically modified foods can be dangerous. Many mainstream scientists, including those running the ISU project, disagree.

The bananas, created by an Australian scientist, contain a gene that is supposed to help people living in Africa make Vitamin A. Proponents say the gene came from a different type of banana, and is completely safe to eat.

The plan, which first came to light in 2014, would involve feeding the bananas to a dozen student volunteers. They would be paid \$900 each.

Earlier this week, activists delivered petitions against the project to officials at ISU and at Seattle headquarters of the Bill and Melinda Gates Foundation, which is bankrolling the project. The activists said more than 57,000 people signed the petitions, demanding that the project be halted.

"ISU students are being asked to be the first to consume a product of unknown safety," the activists said in a prepared statement.

"The study is not being conducted in a transparent manner, and concerned ISU community members have not been able to receive answers about the research design, risks, nature of the informed consent given by the subjects and the generalizability of the study."

Food-science professor Wendy White, who is leading the ISU end of the trial, confirmed through a university spokeswoman that the trial is expected to take place sometime this year. She said the details would be posted on a federal website, as required, before the trial starts.

In the summer of 2014, White's team sent an email to ISU students seeking a dozen female volunteers for the study. White said that the **volunteers would be paid \$900** to eat the equivalent of three bananas each. Just one of the bananas would be the genetically modified type.

The participants were to eat a diet, including the bananas, for four days during each of three study periods, then have their blood tested. White said more than 500 women responded to the query, and 12 were to be selected.

White said in 2014 that the goal of her research was to help people in Africa increase their production of vitamin A.

"In Uganda and other African countries, vitamin A deficiency is a major contributor to deaths in childhood from infectious diseases," she wrote in a statement released by the university. "Wouldn't it be great if these bananas could prevent preschool kids from dying from diarrhea, malaria or measles?"

The scientist said the new type of banana includes a gene taken from another banana species, which naturally produces large amounts of beta-carotene. When people eat beta-carotene, their bodies turn it into vitamin A.

Residents of Uganda and nearby countries don't favor the type of sweet banana that naturally carries the extra beta-carotene, White said. So

researchers have put the gene into a less-sweet type of banana that east Africans often use in cooking.

But the trial was delayed, reportedly because of problems shipping the bananas from Australia.

Hannah Dankbar, an ISU graduate student who helped deliver the petitions earlier this week, said Wednesday that university officials have been unwilling to answer activists' questions. Among other things, she said, ISU wouldn't tell them whether the trial was still planned.

"I'm disappointed that the university did not feel that they could share that information with us in the multiple times that we asked for the status of the study," Dankbar wrote in an email to the Register. "I hope that in the future there are more opportunities for dialogue about research at our public institution between students and researchers. I think all of us can benefit by having open conversations about the ethics and implications of research done at public universities."

The bananas were developed by scientists at Queensland University of Technology in Australia, with grant money from the Bill and Melinda Gates Foundation.