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\$50,000 grant helps Orange Park students' space request

By DEBORAH CEARNAL, Clay County Line

Some students at Orange Park Christian Academy have their sights on the stars in an effort to help us on Earth. They will be able to continue their quest with a \$50,000 grant presented to them in ceremonies Jan. 19 in the school's gym.

The student group, called Tekna-Theos Inc., was presented with a check from the estate of the late Lydia Harvey Nocar, who lived in Clay County prior to her death last year.



"She wanted to be a part of that vision [of Tekna-Theos]," said Alice Basford, Nocar's personal representative. Tekna-Theos, Greek for "children of God," wants to play an integral part in finding a cure for osteoporosis.

Tekna-Theos began five years ago as an idea for a club, said Kevin Simmons, a teacher at the school and Tekna-Theos' president. Simmons said he "wanted to create something for students" so they could "build a medical experiment to send to space." The group evolved into a non-profit company that would pursue funds to "continue to develop a device to send on the shuttle," Simmons said.

Simmons will use the money to further Tekna's already-started project toward that goal. The funds will be used to continue research and develop a bioreactor, to award scholarships and to write proposals to get into a space flight program.

With an \$18,000 grant from the Florida Space Grant Consortium last year, Tekna-Theos was able to contract with NASA engineers in Alabama to build a prototype of a machine the group envisions sending on a shuttle mission. Osteoporosis is a form of bone deterioration, and Tekna students would like to discover why "the rate of formation of bone becomes zero at weightlessness," Simmons said.

"Astronauts lose 1 percent of bone mass per month while they are in space. We must overcome this bone loss problem," he noted. Simmons combined his childhood fascination with how bones work and are made with his interest in space to come up with the idea for the research. Tekna's experiment will take growing bone cells with separate treatments into space and observe and catalog the changes to the cells.

Nocar decided on giving funds to Tekna-Theos when she learned about the group, Basford said, adding, Nocar wanted to give to research and she loved children and Tekna was a good combination.

As Nocar's personal representative, Basford presented several charities to Nocar to decide on how her estate would be divided. Basford's son, Jack, was an Orange Park Christian Academy student and a member of Tekna. He suggested the group as a possible recipient.

"When she found out about those kids doing research, she knew she wanted to give to Tekna," Alice Basford said. "She loved the idea of children being involved." Nocar, who lived in Clay County about eight years, suffered from osteoporosis and rheumatoid arthritis, Basford said. "This is an extension of our seed money, and our goal is to get a bioreactor in space. It's very expensive to get a program up in space," Simmons said.