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Student-led organization awarded grant

By Kelly J. Stigliano, Correspondent

When Kevin Simmons came to teach science and physical education at Orange Park Christian Academy two and a half years ago, he carried with him a dream that would soon be shared by many at the school

A lover of science, space and space exploration, Simmons introduced the idea of creating a bioreactor that would travel aboard a NASA space shuttle. In the spring of 2001 Tekna-Theos Inc. was created.

Tekna-Theos originated as a student club with six members, hi the summer of 2002 it incorporated as a non-profit company run by the students. With three main areas of focus, Tekna-Theos attracts young people interested in cell biology, engineering and marketing.

The cell biology group studies bone cells, tests natural occurring hormones that effect osteoblasts (bone forming cells) and apply results to research in osteoporosis and long-term space travel, such as trips to Mars.

The engineering group takes the experiment results from the biology group and designs hardware to send cells into space on a shuttle.

The marketing group works to get the name "Tekna-Theos" out to the public. They develop relationships with corporate representatives, write articles and focus on fundraising.

From the fundraising side, students are learning to write grants. They recently won $18,640, the entire sum for their first grant. The grant, awarded by the Florida Space Grant Consortium (FSGC), has never been given to a high school before.

Students will use the money towards their lab time in Huntsville, Alabama at the Mar shall Space Flight Center this summer, where six of the eight students will work in the Jab alongside NASA engineers.

The name Tekna-Theos comes from the Bible. John 1:12 speaks of the sons of God. In the Greek New Testament, Tekna is the word used for "sons" and refers to small children or babies. Theos is the Greek word for God.

God has certainly had His hand on this non-profit, student developed and run corporation. They have found favor with influential men, women and organizations. The bright students

involved have won. numerous competitions, spoken with officials at the Kennedy Space Center, Camp Blanding, the Neuroscience Convention in Orlando, Cocoa Beach and at Engineering Day in Jacksonville. They have gotten the attention of Westinghouse Siemens, DuPont, Northrop Grumman, academia, media and politicians.

The students' goals are to design, build, test and fly an experiment into space to investigate the effects of microgravity on osteoblasts, write scientific papers suitable for publishing in a medical or engineering journal, be better prepared for college and make them an integral part of a research and education corporation. The sponsor's goals are to fly a medical experiment into space aboard the Shuttle to investigate the effects of microgravity on osteoblasts, have students learn how to set up a company, operate it and succeed in the "real business" world and to excite the students about potential careers in the fields of science, engineering and marketing.
Simmons has a long-range vision, as well. He would like to develop a package as an educational tool to accentuate other small schools with limited budgets. He would like to develop a curriculum with procedures, tips and methods to form a corporation, create a business plan and seek out funding. As in Tekna-Theos Inc., students would choose their area of focus within the program, motivating them to meet individual goals, group goals and enjoy learning.

For now Tekna-Theos continues to research ways to raise money, begin work in a university lab, build, test and submit to NASA, attempt to publish work and for the seniors, move on to college. Individually and collectively they keep Colossians 3:23 as their motivator.

More can be learned about Tekna-Theos by going to Teknatheos.org, a website developed and maintained by tenth grader Emily Piatt. Students Michael Loveland, Harry Vaswani and teacher Kevin Simmons can be seen at an Anna Holmes' Crystal Workshop on http://crystal.uah.edu/holmes/on the section dated Feb. 2,2003. The summary of this Advanced Student Workshop can be seen at http://florida-protein-crystals-in-space.org/KSC2O03/ and photos can be seen by clicking on Anna's Module.