



PRESS RELEASE FOR IMMEDIATE RELEASE

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A Tissue Engineering Camp for Middle School Students: A Starfish Can Do It, Why Can't I?

PITTSBURGH, July 13th to July 17th and July 20th to July 24th.

A starfish can grow a whole new arm and salamanders can too. But a human can't. Well, humans can, but to a limited extent with the regeneration of skin and bones. Biomedical researchers from the University of Pittsburgh, Carnegie Mellon University, University of Pittsburgh Medical Center, Duquesne University, and the Allegheny-Singer Research Institute are tackling the complex challenge of tissue and organ regeneration and their findings are the basis of an innovative educational program sponsored by the Pittsburgh Tissue

Engineering Initiative (PTEI). Students from across the Pittsburgh region will be challenged to participate as members of a biomedical research team who are challenged to utilize tissue engineering strategies to repair damaged tissue resulting from a sports injury – Much like the Starfish! Fifty middle school students and seven high school camp counselors will take part in a one week camp experience held at the University of Pittsburgh Center for Biotechnology and Bioengineering and other labs and facilities in the Oakland area. Two one-week camps are being conducted July 13th through 17th and July 20th through the 24th.

Now in its sixth year, the summer camp is an intensive, hands-on learning experience for students in grades 6, 7, and 8, with classroom activities and experiments to help them learn about tissue engineering and its potential for treating disease and injury. Tissue engineering, and the broader field of regenerative medicine, is focused on creating functional, healthy, replacement tissues and organs for those that are damaged, diseased, or missing.

The summer camp uses this exciting and rapidly growing field of biomedicine as the basis for a rich science learning experience. The goals of the summer camp are to increase students' process skills across disciplines, enhance their interest in science and technology, increase their awareness of the many

educational and career opportunities in the sciences in their own backyard, as well as increase their awareness of Pittsburgh's leadership role in cutting-edge biomedical science.

"Pittsburgh is one of the leading international centers of research and technology development in tissue engineering and the broader field of regenerative medicine," says Joan Schanck, PTEI Director of Education and Workforce Development. "We are committed to exposing as many of our region's students as we possibly can to the wonders and promise of this cutting-edge field, the excitement of biomedical research, the remarkable work going on here, and the many educational and career opportunities available to them in Pittsburgh."

The format of the summer camp emphasizes hands-on learning, which Ms. Schanck says is the cornerstone of enhanced understanding of the scientific process and the relevance of science to everyday life.

"Students who are actively engaged in a hands-on approach to learning will be most likely to remember material," she explains. "It also encourages them to think by requiring interpretation of observed events, rather than rote memorization." The summer camp is also a lot of fun. "By its nature, tissue engineering is a really cool field of science, which makes for an innovative and, as the campers share, a *cool* field of study," Ms. Schanck says.

The middle school students will be taught by University of Pittsburgh Bioengineering graduate students and science teachers who, themselves, are participants in PTEI's teacher professional development program, with assistance from high school students who are summer high school interns and who simultaneously serve as "camp counselors" to the younger children.

Launched in 2004, the Tissue Engineering Summer Camp has been partially supported by a Department of Community and Economic Development Workforce Leadership grant, a Science Education Partnership Award from the National Center for Research Resources, a component of the National Institutes of Health (Grant #R25 RR023286), and by a Department of Labor grant awarded to the Pittsburgh Life Science Greenhouse and Lyceum Group.

PTEI is a non-profit organization dedicated to improving the health of individuals by establishing the region as an internationally recognized center of excellence in research, education, and commercial development for the advancement of tissue-related medical therapies. PTEI's educational programs span K-12 through postdoctoral training. For more information, visit the PTEI web site at www.ptei.org.

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