



Sault College News Release

For immediate release

Children Help Advance the Field of Biomedical Engineering

*Children Apply Research and Robotics to Explore
How Engineering Meets Medicine with
FIRST® LEGO® League "Body Forward™" Challenge*

(Sault Ste. Marie, ON November 25, 2010) Children around the world have been tasked with researching a real-world scientific issue and designing and building an original robot in the FIRST® LEGO® League (FLL) "Body Forward™" Challenge. This Saturday at Sault College, teams of children guided by their volunteer coaches will demonstrate their problem-solving skills, creative thinking, teamwork, competitive play, sportsmanship, and sense of community.

"Body Challenge" is this year's theme. The Challenge calls for teams of 9 to 14 year-old children to explore the cutting-edge world of Biomedical Engineering to discover innovative ways to repair injuries, overcome genetic predispositions, and maximize the body's potential, with the intended purpose of leading happier and healthier lives. This coming weekend at Sault College, eight weeks of research and design will culminate in the Algoma Regional First Lego League competition where 12 teams of children and mentors will demonstrate their problem-solving skills, creative thinking, teamwork, competitive play, sportsmanship and sense of community.

"Body Forward" is a two-part robotics challenge based on biomedical engineering that requires research to complete the project phase, and science and engineering to master the complex missions of the robot game phase. In the project phase, teams research a body part, function, or system; create an innovative solution to protect, repair, heal, or improve it; and share their solution(s) with the global community. In the robot game phase, teams confront some of today's medical issues and apply robotics, sensor technology, and ingenuity to solve them.

Robot missions in the FLL Challenge range from the familiar, including bone repair, rapid blood screening, and pace makers, to the futuristic, such as nerve mapping, bionic eyes, and object control through thought. The robots, designed by the children and built using LEGO MINDSTORMS® technologies, require a variety of mechanical capabilities to accomplish the missions set forth in the Challenge.

Steve Burmaster, Korah teacher and former Sault College student, has coordinated the area's involvement in FIRST Lego League challenges. In 2006, Burmaster mentored a grade school team in the FIRST Lego League competition held at Science North in Sudbury. He coordinated last year's "Transforming Transportation" competition, along with coordinating a team from Sault College and the School College Work Initiative program, and continues to bring various robotic competitions and learning opportunities to elementary and high school aged students.

"We are very proud of the success of the past three years' event and are pleased to be hosting the competition again this year," explains Sault College's Colin Kirkwood, Dean, School of the Natural Environment, Technology and Skilled Trades. "The community has been very supportive of this competition which fosters an interest and ability among today's youth in science and technology."

The FLL competition is judged in four areas: project presentation; robot performance; technical design and programming of the robot; and teamwork, with a consideration of the FLL Core Values. The highest honour will go to the team that is the most rounded in these areas and best exemplifies the spirit and values of the program. Select teams will also have the opportunity to participate at the *FIRST* LEGO League World Festival, to be held in conjunction with the *FIRST* Championship, April 27-30, 2011 at the Edward Jones Dome in St. Louis.

The competition is open to the public, with the opening ceremonies beginning at 1:00pm and the event running throughout the day. An awards ceremony will take place in the afternoon. Students will compete in the main challenge area completing several robotic missions.

The following schools will be represented at this robotics competition: Anna McCrae, Aweres, Central Avenue (Elliot Lake), Grand View, Greenwood, Kiwedini, Northern Heights, Nore-Dames-Des-Ecoles, RM Moore, St. Ann, St. Mary's French Immersion and William Merrifield.

Spectators are welcome. There is no cost for admission to the event.

Along with Sault College, the Algoma District School Board, Huron Superior Catholic District School Board, the School College Work Initiative and the Knights of Alloy Robotics are sponsoring this exciting event.

To learn more about *FIRST*, go to www.usfirst.org. To learn more about the "Body Forward™" Challenge, go to www.FIRSTLEGOLeague.org.

-30-

About *FIRST*®

Accomplished inventor [Dean Kamen](#) founded *FIRST*® (For Inspiration and Recognition of Science and Technology) in 1989 to inspire an appreciation of science and technology in young people. Based in Manchester, N.H., *FIRST* designs accessible, innovative programs to build self-confidence, knowledge, and life skills while motivating young people to pursue opportunities in science, technology, and engineering. To learn more about *FIRST*, go to www.usfirst.org. To learn more about the "Body Forward™" Challenge, go to www.FIRSTLEGOLeague.org. View the April, 2010 [FLL World Festival Photo Gallery](#).

About Sault College

Sault College reaches students through post secondary, continuing education, apprenticeship training and third party contract training. Sault College offers a full range of programs: Certificates, Diplomas, Advanced Diplomas, Post Graduate Certificates, Degrees, and Apprenticeship programs. Key Performance Indicator (KPI) surveys demonstrate that almost 90% of Sault College students are employed within six months of graduation and student satisfaction is among the highest in the province. Sault College, located in Sault Ste. Marie, Ontario is one of 24 community colleges in Ontario. Visit our website at www.saultcollege.ca for more information.

Please contact:

Tessa Pino, Communications Officer

Sault College

705.759.2554 ext. 2830

www.saultcollege.ca

