Mark Yanovski, Lev Hochman

Wound Infection, Thermal Detection

Challenge: Health
Category: Junior
Region: Winnipeg Schools
City: Winnipeg, MB
School: Grant Park High

Abstract: We have demonstrated that thermal imaging can be used to diagnose wound infections in patients before visual symptoms become present. This allows for earlier treatment preventing further complications. Diagnosing wound infections earlier will allow patients to return home faster. This has the added benefit of creating more space in the hospital for other patients and reducing the cost to the Canadian healthcare system.

Biographies

Mark - Name: Mark Yanovski. Interests: Soccer, Basketball, Technology, Science Career Plan, Becoming a Sports Physiotherapist Chelsea F.C. and Houston Rockets fan School, Grant Park High School Awards, Wanda Neill Tolboom Award Inspiration came from my friend Lev's idea. Further investigations: Put our idea through ethics at the St. Boniface hospital and to conduct the experiment on a much larger scale to prove even further how reliable this idea is. Advice: To work hard, think more, be confident, and do reliable research

Lev - My name is Lev Hochman. I am a grade 8 student at Grant Park High School in Winnipeg, Manitoba. I enjoy playing basketball, soccer, playing the guitar, and canoeing in the summer. This year, I have discovered a passion for science and have immensely enjoyed preparing for this year's Canada Wide Science Fair. Our project this year was actually inspired by a drafty window. Using a thermal camera, we were able to quickly identify differences in temperature between different surfaces. This raised the question: could a thermal camera detect subtle skin temperature changes such as found in wound infections after surgery? For that answer, you'll...