Spore – Elation, I’m the Father of a Scientist

Raymond J. Roberge, MD, MPH, FAAEM, FACMT

Pittsburgh, PA

Parents play many roles. Sometimes parents are like farmers, purposefully planting an idea in their child that takes hold and flourishes into something wondrous and beautiful. Other times, they are like great chefs, adding just the right ingredients to allow a child’s simmering talents to develop spectacularly. However, many times our children get ideas from us that we have unknowingly, or unwittingly, introduced as part of everyday banter, and, as every parent knows all too well, a child’s recall is excellent.

Following the 2001 US Postal Service Anthrax attack, I was contacted by Cable Network News (CNN) reporter, Catherine Carney, and asked to respond to questions and concerns from her viewing audience regarding the recent bioterrorism incident. One viewer called in to the program and asked if it would be possible to decontaminate anthrax spore-laden mail envelopes through the use of a household iron. I responded that sufficiently high heat could certainly destroy *Bacillus anthracis* spores, but I was unaware of any research specifically addressing the use of a standard household iron in this context or if it was capable of generating the requisite heat. I found the question most intriguing and, over supper with our children that night, discussed the issue with my wife, a registered nurse and, importantly, a woman with considerable experience with that potential bioterrorism defense tool, the household iron. Our tableside analysis notwithstanding, the question remained unanswered for 3 years until our 17-year-old son, Marc, decided to address the anthrax vs. the iron question. Marc was looking to develop a science

project for the upcoming Pennsylvania Junior Academy of Sciences annual regional competition, and he decided to tackle the question of *iron vs. anthrax*. I explained that such an undertaking would require considerable effort, but he remained enthused and undaunted. With the significant motivational and intellectual support of a dedicated high school science teacher, Mark Krotec, and my occasional observational suggestions, my son completed the project. Having seen firsthand the amount of time and work he had put into the undertaking (coupled with the fact that—to the best of my knowledge—such a study had not been undertaken) I urged my son to consider doing something that most high school seniors do not attempt; namely, to try to get original research published.

In the weeks that followed submission of his work, my son’s initial excitement gradually gave way to trepidation of possible rejection. I began to question whether I had unwittingly subjected my son to the possibility of publisher rejection at so tender an age. One morning while at work, I unexpectedly received a phone call from my son notifying me that his work was accepted for publication. The elation in his voice was one of those very special moments between a parent and a child. As a toxicology researcher, I felt immeasurable pride seeing his work in this edition of the *Journal of Medical Toxicology*.

An idea from a television viewer, small talk around a supper table, and a dedicated high school science teacher were all the right ingredients a bright, energetic student needed to prepare a successful project.