

BIONEERS DAY 2.1: GREEN JOBS? TOXICOLOGISTS WANTED. (THE SAD TALES & REAL PROMISE OF A GREEN SCIENTIST)

By NATE DOWNEY

A longtime Polaroid employee addressing thousands of cutting-edge environmentalists? Sounds like a concoction for conflict, but it turned out to be a fabulously successful experiment yesterday. John Warner told his story about becoming the founding father of Green Chemistry with one part optimism, two parts tale of innocent death, three parts useful information, and four parts humor (ranging from deadpan to verbalized slapstick).

While taking Chem101 merely to fulfill a college requirement, Warner stumbled into extra-credit research because he suddenly found hours of time on his hands. The drummer of his busy rock band (which he said, "sounded a lot like The Cars — but with better lyrics") died of leukemia, and Warner needed something to do. Warner said he would have probably held on to his preconceived notion that science is boring and uncreative if it were not for the death of his friend.

Years later, a more terrible sadness would overcome him. While vaguely pondering his life and his career and his awards and his success at bringing "green chemistry" to industry, he looked up at the ceiling during his two yearold son's funeral and wondered if something he had touched, some chemical, had caused the birth defect that killed his child.

Mourning the fact that he had never taken any toxicology during all of his years as a chemist, he added an important fact: "Not one college chemistry program in this country requires a course in toxicology." Fortunately, the chemistry landscape is changing, he said, as more and more young people come in with a desire to use chemistry for sustainable purposes. "You're no longer laughed at for talking about sustainability," he said. The industry is slowly turning its focus to green chemistry not only due to societal and market pressures, but also because mimicking nature (as opposed to creating materials that combat nature) tends to work better than the industry previously expected.

Warner's tale is terribly sad, but his message is ultimately a very entertaining one — filled with a keepable promise to help us save civilization from itself using biomimicry, green chemistry, and intellectual ecology.

