

**President David Oxtoby**  
**Pomona College Commencement 2014**  
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Last November, I read an article in the *New York Times* (11/14/2013) that probably few of you noticed, but I put it aside because I wanted to tell you about it today. It described an Argentine car mechanic named Jorge Odón who had developed a new device to save babies stuck in the birth canal during difficult births. How did he come up with this idea, which is now being tested widely and has the potential to save many lives in the future? He had watched a YouTube video about how to extract a lost cork from inside a wine bottle using a plastic bag. While sleeping that night, “his unconscious made the leap” to the conclusion that a similar approach could help to extract a stuck baby from the birth canal.

Odón tested the idea using a glass jar and his daughter’s doll and then, through the intermediary of a cousin, spoke with an obstetrician at a major hospital in Buenos Aires. That doctor put him in touch with a friend at the World Health Organization, which led to a meeting between the car mechanic and Mario Merialdi, the head of the WHO program for improving maternal and postnatal health, who was in Buenos Aires for a medical conference. Dr. Merialdi was excited – their 10-minute meeting turned into two hours – and the Odón device has now gone through laboratory development, a New Jersey company has begun to manufacture it, and it is undergoing limited testing in Argentina and elsewhere.

Why in the world am I telling you this story at your graduation? Because I think it illustrates some important lessons about the nature of creativity and innovation, core values that we teach and encourage at Pomona College as part of a liberal arts education. It also shows how the process of bringing new ideas to the world has changed and become more global in recent years.

Coming up with new ideas has always been somewhat mysterious; it is often when you are thinking of something else, simply taking a walk (or even sleeping) that inspiration strikes. A familiar example in my own field of chemistry is the discovery of the structure of benzene by August Kekulé during a dream about snakes chasing each other in circles. Odón made the link between wine bottle and birth canal in a dream; he woke up his wife, who said he was crazy and went back to sleep. The mysterious ways in which the brain works, making connections where they are least expected, provides much for neuroscientists to explore in the future. Sometimes it

seems that chance plays a central role, but, in the words of Louis Pasteur, “Chance favors the prepared mind.”

While some elements of this story are timeless, others could only have taken place in the 21st century. A car mechanic watches a YouTube video produced somewhere else in the world and uses that as a key link in his invention. YouTube did not even exist 10 years ago. Knowledge has been transformed by the lightening fast communication of information around the world.

Just coming up with an idea is not enough; I am sure that many of you have come up with world-changing ideas talking with friends late at night in your dorm room. What also mattered here was the persistence of the car mechanic, teamwork, and the network of real, not virtual, relationships that connected him in four steps to exactly the person in the world who could help put his idea into reality.

There are Pomona College stories about creativity and innovation that illustrate the same principles I have been discussing. When I was traveling in India with my family over the New Year holiday, I opened the local paper in the town of Thiruvananthapuram (Trivandrum) and saw an article about how a local young entrepreneur had helped to develop a new and affordable infant warmer for newborn premature babies. The article described how a team of four had met at Stanford, traveled to Kathmandu, Nepal, where they witnessed the immense need firsthand, then came up with a new concept, tested it, and is now manufacturing the device in India and saving thousands of lives. What caught my eye when I saw the article was another member of the team: Jane Chen. I recognized her as a Pomona graduate who majored in psychology and who several years ago won our Inspirational Young Alumni award for exactly this joint work.

So as you graduate today and go on to further education or directly into the workforce, I urge you to think about how you can use your Pomona College education to advance creative and innovative ideas that will help the world. Some of you may actually invent new devices like the Embrace Infant Warmer or the Odón device. Some of you may unwittingly play a role in future discoveries by creating YouTube videos that will cause someone across the world to come up with a brand new idea. Some of you may follow what could be described as a more conventional path to success, becoming head of a New Jersey medical device company or a highly placed doctor in the World Health Organization; by seeing and supporting the creative ideas of others you will also play a role in causing change. And finally some of you will move from being students to

being educators, helping to prepare students to work together and come up with new ideas with world-changing potential in every field.

I wish you the best of luck in whatever creative and innovative adventures you embark on today!