A strange English saying, with which you are likely all familiar, asserts that “curiosity killed the cat.” Cats certainly do enjoy nosing around in things, and of course that can be dangerous for them; but we haven’t always believed such behaviour has potentially fatal consequences. In fact, the proverbial cause of feline death until the very end of the Nineteenth Century was not “curiosity” but “care”—in the sense of “worry” or “anxiety”: “care killed a cat” is the form of the proverb we find in Shakespeare, for example. In 1898, however, we find “curiosity killed the cat” appearing in print for the first time.

What else happened in that year? William Ramsay and Morris Travers discovered the Rare Gases Neon, Krypton and Xenon (without which the long-life lightbulb and the thermal multi-pane window would not have been possible); Marie and Pierre Curie revealed in July they had discovered Polonium; polycarbonates (without which we would not have DVDs today) were first discovered; and polyethylene (plastic) was first synthesized. 433 Eros, the first Near-Earth Object was discovered in the sky; physician and Nobel Laureate Camillo Golgi discovered the Golgi Apparatus—the network inside cells which enables the transmission and reception of information between cells; Rudolph Diesel patented what was later known as the Diesel engine; and on December 21st, the Curies discovered radium.

All of these discoveries were in one way or another the result of curiosity, and it is certainly true that a number of them were very dangerous: Marie Curie, for example, died in 1934 of aplastic anemia caused by radiation exposure. 433 Eros, the 16.8km diameter asteroid whose orbit brings it perilously close to earth could certainly have apocalyptic consequences for all of us, including descendants of the “cat” who discovered it; but of course, strictly speaking, such a hypothetical disaster would have nothing to do with the curiosity of the person who identified the asteroid. In fact, if it were on a collision course for earth it might be better not to know: the cat will be dead whether curious or incurious!

Most speakers of English today know the curious cat proverb, and have assimilated its message—perhaps quite easily in the nuclear age—that “he that prythe into every cloud may be struck with a thunderbolt,” as an older English proverb puts it.1 Interestingly, though, in the mid Twentieth Century there emerged a rejoinder to the original proverb that is still very little known: in response to the declaration that “curiosity killed the cat” came the assertion that “satisfaction brought it back.” In other words, the negative consequences or effects of curiosity are redeemed by the knowledge it generates. Or put yet another way, “satisfaction” (possessing answers

1 See John Clarke, Paroemiologia Anglo-Latina (1639)
and achieving solutions) is inseparable from—and in a real sense justifies—the sometimes risky journey which curiosity compels us to take.

Albert Einstein famously said of himself, “I have no special talents. I am only passionately curious.” And from that passionate curiosity came insights that altered fundamentally the way in which our universe is understood, as well as our relationship with that universe: without the general theory of relativity, no GPS would work accurately; without his 1904/5 theory of the photoelectric effect, we would have no solar panels; and without his 1917 theory of stimulated emission we might have no lasers (Light Amplification by Stimulated Emission of Radiation).

It is a source of great satisfaction and an illustration of the power of curiosity that Dr. Donna Strickland, one of the winners of this year’s Nobel Prize for Physics and a McMaster alumna, conducted her Nobel-winning work while a PhD student at the University of Rochester in New York. Demonstrating the truth of Einstein’s assertion that “the important thing is to not stop questioning,” Dr. Strickland looked for ways to increase the peak power of lasers—to amplify the existing means of amplifying light, as it were—and her invention, Chirped Pulse Amplification, won her the 2018 Nobel Prize.

Curiosity is fundamental to the research mission of our University. The desire to understand the world around us and ask and answer the questions we have is the element that underpins all the work that happens in labs, libraries, offices and performance spaces across the campus. Not all the questions we ask, and not all the answers we provide, have immediate application or impact; but all of them deepen our understanding and lead us on to other questions and answers which may in time have a transformative effect upon human beings, culture, society, and the physical world. That is the “satisfaction” that ultimately validates curiosity: whether it is immediately discernible, or whether it discloses itself over decades or centuries, the fruit of our questioning sustains human progress.

That last is an observation pertinent to many other aspects of life besides research. Curiosity is as essential to a learner in first year of university as it is to a Nobel-Prize-winning investigator; and although the “satisfaction” that results is more personal than public, accruing in the first instance to the learner rather than to the broader world, in the long run we owe every great discovery to curiosity as an individual’s habit of mind. Here at McMaster we describe ourselves as “research-focused student-centred” in order to draw attention to this continuity: what goes on in the undergraduate Humanities classroom may look and be very different from what goes on in the Michael G. DeGroote Centre for Infectious Disease Research, but both are driven by the same spirit of inquiry and questioning.

2 From the memoirs of William Miller, quoted in Life magazine, 2 May 1955; Expanded, p.281.
Curiosity is no less vital to human progress outside of the academic context. At a time when talk of “fake news” and even “fake research” is rife, the importance of questioning the things we read and hear, and continuing to be curious about the world around us, become ever more important. The skills of critical thinking, analysis, discernment and carefully-reasoned judgement, which all of the graduates sitting before me have been exposed to during their time at McMaster, are the tools needed to respond to the “post-truth” environment in which we find ourselves today. Without curiosity and a highly-developed skill at asking questions, we risk becoming like the White Queen in Lewis Carroll’s *Through the Looking Glass, and What Alice Found There*. When Alice observes, “one can’t believe impossible things,” the White Queen replies: “I daresay you haven’t had much practice. . . . When I was your age, I always did it for half-an-hour a day. Why, sometimes I’ve believed as many as six impossible things before breakfast.” If every morning you follow a certain world leader on Twitter, graduates, you can do so too!

Generally, though, and except in our experience of art and other deliberate acts of the creative imagination, believing impossible things is good for neither the individual nor society. When ideology trumps evidence—as on climate change, for example—the consequences for our world are positively and profoundly destructive. On the other hand, curiosity and an active, critical engagement with society and the world open opportunities for us to advance our collective well-being and the health of our planet.

Your studies at McMaster, in whatever discipline, have equipped you to contribute meaningfully to that vitally important cause, and I leave you with hope and a heartfelt plea that you will do so. Your energy, idealism and critical approach to the problems that face us will alone cause us to prevail. “Care”—worrying and anxiety—will on its own not get us very far. But the habit of asking questions, of pushing always towards understanding and the apprehension of truth, will be our salvation. Remember the proverb with which I began: whatever the apparent cost of honest curiosity, it is always repaid. Curiosity may appear on occasions to have killed the cat, but satisfaction almost always brought it back for another of its nine lives.

My warmest and best wishes to you all for an exceedingly feline future.