Inspiring Young Scientists

In conditions of modern life, the rule is absolute: the race which does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your wit, not all your victories on land or sea, can move back the finger of fate. Today we maintain ourselves. Tomorrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will be pronounced on the uneducated.

A.N. Whitehead


In any human pursuit, professional or otherwise, one’s achievements often rest upon some early inspiration and support from others. It is not surprising, then, that this is exactly what makes a great scientist. Undoubtedly, a bright and inquisitive mind is a prerequisite for such an undertaking, but one also has to be fortunate enough to have been inspired by someone or something equally as great. Perhaps it was an energetic chemistry teacher in high school, or a quirky physics professor at university who demonstrated value of having a sound education by opening your mind to new worlds; or perhaps it was even a sentence from an article or a chapter from a textbook that inspired your “eureka” moment. Regardless, inspiration, in whatever form, is most certainly required to foster the development and growth of young scientists.

While reminiscing about the three scientists who encouraged and supported him throughout the course of his education, successful physicist and educator Walter Massey eloquently addressed two perplexing problems facing today’s science community (Science 258: 1177-79, 1992). We should soon expect a period when the demand for researchers far exceeds the supply. Yet, we are often failing to attract young people, minorities and others, to aspire to careers in the sciences. This no doubt underscores the value of mentoring, a way for the torch of knowledge and experience to pass from one generation to the next, and through which current scientists can continue to have an enduring influence on future scientific achievements.

The editors and authors who choose to be a part of Hypothesis no doubt strive towards this longstanding goal; we are simply using a currently untapped medium at the University of Toronto to disseminate such ideas and objectives within the university community and beyond. In this issue, Singh addresses the need for mentorship in the lab, while Hariri discusses his visions for Hypothesis, suggesting that this journal may become a way to create a national network of young scientists who are free to share ideas and challenge each other to reach new heights. Mehta and Hede represent Hypothesis’ foray into what we hope will be the first of many international submissions.

The articles by Smookler and Olivieri present their insights on industry-sponsored research, one from a graduate student, and one from a seasoned academic researcher. While the outlook for scientific integrity in research may appear bleak and discouraging, this confirms the need for increased accountability and encouragement amongst the members of the scientific community.

A new school year has just begun, and as this new class of graduate students begin their research, let us begin afresh, emboldened to share our experiences, knowledge and expertise.