



**“...it takes all the running you can do, to keep in the same place.”**

Lewis Carroll: *Through the Looking-Glass, and What Alice Found There*

In Carroll’s novel, Alice steps through the looking glass to enter a world full of contradictions and reversed logic. To Alice’s query about why they aren’t getting “to somewhere else” after running so fast for so long, the Red Queen provides this short, yet prophetic, response. The concept embodied by the Red Queen’s statement has been adapted by many fields ranging from sociology, to physics, to biology to explain the need for constant change. For example, the Red Queen Hypothesis was proposed in the field of evolutionary biology by Leigh Van Valen in 1973 to explain the fact that every species needs to continually change in order to keep pace with ongoing and constant changes in their co-dependent species and their environment. Failure to change risks failure to thrive and possible extinction.

I often reflect on how the Red Queen’s statement applies to our approach of continuous improvement in Geisel’s core missions. For biomedical and clinical research, it is inherent to constantly pushing the boundaries of knowledge to improve on our understanding of biologic mechanisms and healthcare systems to improve the human condition. We are also innovating in the area of medical education to ensure that our graduates are best equipped to provide outstanding clinical care and to make meaningful improvements to the systems of care where they work.

This philosophy may appear daunting to some, but to me, it’s energizing to be part of a culture and an organization where continuous innovation and improvement is the norm. In this issue, we highlight many areas of change and introduce you to the students and faculty that are leading those changes.

It all begins with people. In these pages, I am pleased to introduce some of our new faculty. These are remarkable individuals who bring to us expertise that will expand our efforts in a broad range of topics from improving clinical practice, to cancer, to life-threatening lung infections, to finding answers buried in vast amounts of genomic data, to understanding basic mechanisms regulating cell function. Moreover, we profile one of our MD-PhD students who is at the heart of combining the practice of medicine with the advancement of new medical knowledge through her work to improve therapies for neonatal herpes.

In the field of medical education, I am delighted to be one of seven schools collaborating in the National Transformation Network that is leading curriculum innovation supported by funding from the Kern Family Foundation. In the face of an overwhelming volume of information, the shared mission of this network of schools is to ensure that medical curricula provide for professional character development, competence, and caring.

Also highlighted are our efforts to address the national opioid epidemic, for which, the state of New Hampshire sits at the epicenter. Our strides in tackling this epidemic are being recognized nationally. The lessons learned, whether it be improving treatment for neonatal abstinence syndrome, the effectiveness of medical-assisted therapy, or the analysis of healthcare delivery systems, are that improvements lie at the intersection of partnerships between healthcare systems and community networks.

Finally, many of these changes would be impossible without the shared vision and enthusiasm of our philanthropic partners. We strive to address the world’s health problems and it is through the generous support of many donors that we are able to continually push the boundaries to increase our impact. We are grateful to the people who share our vision for continuous innovation in all that we do and who have supported our novel programs. Their stories are told in these pages and underscore the power of these partnerships in creating real-world change.

A handwritten signature in black ink that reads "Duane A. Compton". The signature is written in a cursive, flowing style.

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