



**During a recent visit to New York City to meet with alumni and friends of the school, I took the opportunity to visit the observation deck on the 86th floor of the Empire State Building.**

It was a beautiful day with unlimited visibility (I, of course, posted a photo on Instagram). Looking at the Manhattan skyline from that vantage point, I was impressed by the integration of vertical and horizontal design principles on all scales—from the architectural design of individual buildings (the Chrysler Building and One World Trade Center) to the gridded layout of streets.

The striking visual cue offered by the city's skyline prompted me to reflect on how vertical and horizontal design principles exist within our organization. On the vertical axis are groups organized into departments based upon scientific topic—Biochemistry and Cell Biology; Biomedical Data Science—or clinical specialty, Surgery or Radiology. This effectively convenes faculty, staff, and students who are dedicated to education,

research, and clinical care missions in particular scientific disciplines.

In contrast, some problems are so complex that they are not easily compartmentalized within a departmental framework, and new and impactful solutions to their causes and treatments only emerge from interdisciplinary approaches. On this horizontal axis, groups of faculty, staff, and students are organized into centers based upon the overarching problems they are trying to solve. A horizontal organization in centers draws members from different departments together into collaborative teams to conquer extremely complex problems.

In the following pages, you will read about some of our centers, both well-established and emerging.

Our Norris Cotton Cancer Center, established nearly 50 years ago following the federal government's declaration of war on cancer, was designated a Comprehensive Cancer Center by the National Cancer Institute (NCI) in 1990. This year Dr. Steven Leach, director of the Cancer Center, led the successful renewal of our NCI-designation, a distinction shared by only 51 other cancer centers nationwide. This is a difficult and time-consuming process that happens every five years. Kudos to Steve and his team for their outstanding work.

You will also learn about our Children's Environmental Health and Disease Prevention Research Center, which launched in 2010 and is part of a national network of research centers focused on revealing and mitigating the life-long detrimental effects of early life exposure to environmental agents, such as arsenic. Discoveries from this center have been pivotal in leading to local and federal environmental and health policy changes.

We also feature our Center for Global Health Equity, which recently received a transformative gift to support learning opportunities for both Dartmouth and Geisel students interested in global health.

Our newest center, the Center for Quantitative Biology, is funded by a grant from the National Institutes of Health and designed to bring together and enhance initiatives in computational biology, bioinformatics, and experimental genomics across Dartmouth. It's an exciting vision focused on using new technologies that unveil how treatment responses can be influenced by cell-to-cell variations within tissues.

I hope these stories provide you with a greater appreciation for how our organization develops solutions to serious challenges in medicine from different directions.

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

**DUANE COMPTON, PHD**  
DEAN, GEISEL SCHOOL OF MEDICINE