

EXECUTIVE SUMMARY

A MESSAGE FROM NJIT PRESIDENT JOEL S. BLOOM

SPOTLIGHT ON CSL

This issue of *NJIT Magazine* shines a spotlight on the College of Science and Liberal Arts (CSLA), which is dedicated to instruction in the mathematical, physical and biological sciences as well as traditional liberal-arts disciplines. CSLA is home to internationally renowned research centers and award-winning professors. Its faculty also frequently partner with colleagues from NJIT's other colleges and schools to engage in research that explores emerging frontiers. These interdisciplinary initiatives cut across disciplines including genomics, neuroscience, ecology, biomechanics, solar physics, photonics, environmental science, industrial mathematics, technical communication, social media and other disciplines to address the most complex challenges of our time.

Assistant Professor Casey Diekman, Department of Mathematical Sciences, and Assistant Professor Alexei Khalizov, Department of Chemistry and Environmental Science, are working to expand the boundaries of our knowledge on two very different scientific frontiers. A common denominator in their respective work, though, is the recognition and support resulting from the significance of their efforts, including recent Faculty Early Career Development (CAREER) grants from the National Science Foundation (NSF). CAREER grants are among the NSF's most prestigious awards, offered specifically for the benefit of younger faculty who, in building their careers, have demonstrated outstanding potential as both educators and researchers.

CSLA is unique among other science and liberal arts colleges due to its placement within a largely STEM-based university. In this issue of *NJIT Magazine*, Dean Kevin Belfield, who assumed leadership of CSLA in 2014, shares his strategic vision for the college, which includes increasing the number of liberal arts graduates with a solid foundation in and understanding of the STEM disciplines.

As demonstrated by Hurricane Sandy, New Jersey's coastline is vulnerable to the effects of the complex interaction of natural forces and human activity. The article "Coastal Perspectives" provides an overview of the research conducted by Nancy Jackson, a geomorphologist in the Department of Environmental Science. Jackson currently has funding under a Sea Grant from the National Oceanic and Atmospheric Administration to evaluate dune-building processes and the protection that dunes provide.

I hope you enjoy reading these articles, and I welcome your feedback.



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NJIT's College of Science and Liberal Arts is moving into the forefront of many national research activities, from solar astronomy to mathematical modeling.

Cover photo: Diane Cuddy