BOSTON UNIVERSITY

WHY SUPPORT RESEARCH AT THE NATIONAL SCIENCE FOUNDATION?

SO YOU CAN HELP INFORM OUR YOUNGEST MINDS, REVOLUTIONIZE RECYCLING, AND STRENGTHEN OUR CITIES AGAINST CLIMATE THREATS.

And that's just for starters. Through $41.7 million in research grants, Boston University has been helping the National Science Foundation (NSF) advance the frontiers of human knowledge, which has led to breakthroughs and discoveries that could change our lives for the better.

COVID-19 KNOW-HOW FOR IMPRESSIONABLE MINDS

Misinformation can be as deadly as any virus. That's why the NSF is supporting researchers like BU child cognition expert Deborah Kelemen, who is investigating how knowledge of COVID-19 among children is shaped by adult misconceptions. Kelemen and her colleagues are designing a pilot program to educate first and second graders about best public-health practices, and will create kid-friendly learning tools that explain the workings of the disease, for students learning at home or in the classroom. Researchers hope their findings will shed light on how medical perceptions impact reality, and will create a generation literate in public health.

REVOLUTIONIZING RECYCLING

Can a robot learn to quickly separate a cardboard box (recyclable) from a foam box (nonrecyclable)? BU computer scientist Kate Saenko thinks so. Thanks to NSF funding, she'll be part of a team designing a robot that will identify and sort items passing through recycling facilities with the aim of creating a more efficient, profitable system. Currently, thousands of workers across the country manually sort waste materials, but researchers don't intend to leave those people without jobs. The team will evaluate opportunities to create new, safer jobs to complement automated recycling systems—a win-win all around.

RAISING RESILIENT CITIES

More than half the world's population lives in urban areas, which means large numbers of people must contend with pollution and extreme weather elements like heat waves and storm surges. Solving these challenges requires a workforce equipped with interdisciplinary technical knowledge and communication skills. That's why the NSF is funding BU's graduate program in Urban Biogeoscience and Environmental Health ("BU URBAN"). Combining broad training across science, management, policy, communication, community engagement, and city governance, this program prepares PhD students for careers in academia, government agencies, NGOs, and the private sector. In other words, it takes a village to raise a resilient city.

We hope you'll give strong consideration to supporting research funding for the NSF. If you have any questions or would like to discuss the role that NSF research plays in our daily lives, please visit bu.edu/federal.

ADULT MISINFORMATION CAN SKEW A CHILD'S UNDERSTANDING OF COVID-19. A BOSTON UNIVERSITY RESEARCHER HAS A REMEDY.