WHY SUPPORT RESEARCH AT THE NATIONAL INSTITUTES OF HEALTH?

SO YOU CAN CHANGE CAVITY-CAUSING BEHAVIORS WITH A TEXT, STOP A DEADLY OUTBREAK, AND BUILD A BIONIC PANCREAS.

And that’s just for starters. Through $200.6 million in research grants, Boston University has been helping the National Institutes of Health (NIH) improve human health, and even save lives.

OMG! CAN TEXT MESSAGES CHANGE PARENTAL BEHAVIORS THAT LEAD TO CHILDHOOD CAVITIES?

Getting a cavity is bad. But getting a cavity when you’re a kid can harm your self-esteem and school performance. To reduce childhood cavities and sugar-sweetened beverage and food consumption, Belinda Borrelli and Michele Henshaw, Boston University professors of health policy and health services research, will use their $4.8 million grant from the NIH to develop and test a text-messaging program for parents. Researchers will work with families at urban community health clinics, since they treat more than 4.5 million children nationwide. Once parents opt in, they’ll receive texts that’ll encourage specific actions to reduce childhood cavities and improve overall oral health. Which is definitely something to smile about.

HOW AN OUTBREAK OF IDEAS CAN HELP PREVENT AN OUTBREAK OF DISEASE.

Ebola. Zika. Marburg. These diseases affect a lot of people and keep the rest up at night. Which is why Boston University, with support from the NIH, created the National Emerging Infectious Diseases Laboratories (NEIDL). This 192,000-square-foot facility is dedicated to diagnosing and treating the world’s most deadly diseases—and is one of only two Biosafety Level 4 labs at a US university. NEIDL is currently conducting research to detect Ebola, Zika, and Marburg infections even before symptoms develop, which could be a game changer for them, and all of us.

GOAL: CHANGE HIS SON’S LIFE. END GOAL: CHANGE THE LIVES OF MILLIONS.

Most parents would do anything for their children. And Ed Damiano, Boston University professor of biomedical engineering, did just that. To help his son manage his type 1 diabetes, he and his team created and built a bionic pancreas. This engineered organ, called the iLet™, measures blood-sugar levels every few minutes. But the best part, according to most people with diabetes, is that the iLet™ determines and dispenses just the right amount of insulin or glucagon to automatically regulate blood-sugar levels, making the relentless grind of diabetes management a thing of the past. With support from the NIH, Damiano is developing his bionic pancreas so that life with diabetes will be easier, safer, and much less burdensome for his son—and 2 million others living with the disease.
CAVITIES AFFECT 28% OF CHILDREN BETWEEN AGES TWO AND FIVE, AND BOSTON UNIVERSITY RESEARCHERS AIM TO BRING THAT NUMBER DOWN WITH A TEXT MESSAGE.