# WHY SUPPORT THE NATIONAL SCIENCE FOUNDATION?

## SO YOU CAN HELP RESEARCHERS STOP THE SPREAD OF ONLINE HATE, DEVELOP AN "ALEXA" FOR DEAF PEOPLE, AND BETTER MANAGE URBAN WILDLIFE.

And that's just for starters. Through \$37 million in National Science Foundation (NSF) research funding in FY2022, Boston University has been advancing the frontiers of human knowledge, which has led to breakthroughs and discoveries that could change our lives for the better.

### COMBATTING CYBER MOBS

As seen all too often lately, social media has become a megaphone for false information, hate speech, and extremism. Social networks struggle to keep up, mostly taking action after the damage has been done. Boston University computer engineer Gianluca Stringhini aims to change all that. With support from NSF, he is developing tools to automatically identify fake or threatening accounts so that moderators can take action. Stringhini and his investigators are collecting information about fake accounts and will develop algorithms to learn their behavior. If his team is successful, civil discourse could once again be the loudest voice in the room.

### OPENING WORLDS FOR THE DEAF COMMUNITY

Most of what we know about how languages work and how they are learned is based on studies of spoken languages, without consideration of sign languages. Armed with NSF funding, BU Assistant Professor of Deaf Studies Naomi Caselli is documenting the properties of American Sign Language and uncovering the structure of the ASL lexicon. She collaborated with BU computer engineers to develop an interactive visualization that makes the discoveries accessible to researchers, teachers, and ASL learners. Similar databases for spoken languages have been critical in developing speech recognition technologies like Alexa and Siri, something deaf people have long been excluded from.

### SEEKING HARMONY IN THE (SUB)URBAN WILDS

Climate change and urbanization are bringing wild animals into greater contact with humans. That means wildlife managers and conservationists must find new ways to protect wildlife while minimizing conflicts with the local population. But what drives management strategies? By surveying urban and suburban communities, consulting hunter diaries, and interviewing town officials and residents, Associate Professor of Earth & Environment Anne Short Gianotti plans to answer that question. Focusing on overabundant deer populations, Short Gianotti will enhance fundamental knowledge about interactions between humans and deer, and how that evolving relationship feeds into municipal decisions surrounding the safety and harmony of our shared ecosystem.

We hope you'll consider 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.

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BOSTON UNIVERSITY RESEARCHERS ARE OPENING UP WORLDS FOR THE DEAF COMMUNITY.