Firearm violence is a serious public health problem that causes about 100 deaths per day across the United States. The university launched an initiative that encourages and coordinates research across disciplines to develop new knowledge and tools to address firearm violence. By creating stronger infrastructure for research, educational activities and community outreach related to firearm injury prevention, U-M is better equipped to address the complexity of this public health problem by integrating the perspectives of multiple disciplines to find solutions.

As global carbon dioxide emissions continue to grow, a diverse set of solutions is critical to reduce, reverse and remove these emissions and prevent further atmospheric warming. The university’s CO2 initiative aims to reduce the equivalent of 10 percent of current atmospheric carbon dioxide emissions by 2030. That equals a 10 percent reduction in carbon dioxide emissions, which is substantially lower than the 26 percent reductions needed in the construction, transportation and energy sectors to meet the Paris climate accord. University of Michigan researchers are partnering with colleagues across disciplines to find solutions.

The Great Lakes comprise more than 20 percent of the world’s supply of surface freshwater, but about 1.5 million people get their drinking water from the Great Lakes. U-M researchers in disciplines ranging from science and engineering to public policy and sustainability are partnering with communities and government agencies to address the root causes of, and potential solutions for, the most important issues impacting the Great Lakes, including harmful algal blooms, invasive species and rapid water level changes.
SERVING THE WORLD THROUGH RESEARCH

How do you measure the impact of university research?

I often field this question from both internal and external partners, as well as students, alumni and visitors. The University of Michigan is committed to translating research outcomes into societal solutions. Our research expenditures, which reached $1.62 billion in FY2019, are important in order to comprehend the vast amount of research led by U-M, and beyond. But even more important is our collective focus on how that funding benefits society and external partners, our researchers and students.

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No.1 IN RESEARCH VOLUME AMONG U.S. PUBLIC UNIVERSITIES
National Science Foundation

-16,000 RESEARCH EMPLOYEES SUPPORTED BY RESEARCH FUNDING

502 NEW INVENTIONS

$118M FUNDS LICENSED OR OPTIONED RESEARCH EXPENDITURES

22 NEW STARTUPS

$888M FUNDS GENERATED FROM RESEARCH EXPENDITURES

$1.62B IN RESEARCH EXPENDITURES

RESEARCH IN ACTION

Autonomous Technologies

An estimated 10 million Americans suffer from traumatic brain injury (TBI), a life-changing injury that affects an estimated 2.5 million Americans each year. With a $47.8 million contract from the U.S. Army, the U-M AUTONOMOUS TECHNOLOGIES (AUT) center is helping to fund research on how best to improve outcomes for severe TBI patients.

Traumatic Brain Injuries

An estimated 2.5 million Americans sustain a traumatic brain injury (TBI) each year, with 30% of all injury-related deaths and many who survive are left permanently disabled. With $32 million in support from the National Institutes of Health, U-M researchers at the Institute for Social Research’s Survey Research Center aim to enhance our understanding of informal caregiving to older adults with Alzheimer’s disease and related dementias through new national longitudinal data from the Robert Wood Johnson Foundation’s National Study of Informal Caregiving. An estimated 5.5 million Americans, most of whom are 65 years or older, have dementia caused by Alzheimer’s disease. With a $10 million grant from the National Institutes of Health’s National Institute on Aging, U-M researchers at the Institute for Social Research’s Survey Research Center aim to enhance our understanding of informal caregiving to older adults with Alzheimer’s disease and related dementias through new national longitudinal data from the Robert Wood Johnson Foundation’s National Study of Informal Caregiving.

DoT

NASA

DoE

DoD

NSF

HHS

Table 1. Technology Transfer Results

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Figure 1. U-M Research Expenditures

Figure 2. U-M Federal Funding by Agency

Figure 3. U-M Federal Funding by Unit

Table 1. Technology Transfer Results

No.2 IN RESEARCH VOLUME AMONG U.S. PUBLIC UNIVERSITIES

No.3 IN RESEARCH VOLUME AMONG PUBLIC UNIVERSITIES

No.4 IN RESEARCH VOLUME AMONG ALL U.S. UNIVERSITIES

No.5 IN RESEARCH VOLUME AMONG PUBLIC INSTITUTIONS

No.6 IN RESEARCH VOLUME AMONG PUBLIC AND FEDERAL INSTITUTIONS

No.2 IN RESEARCH VOLUME AMONG ALL U.S. UNIVERSITIES

No.3 IN RESEARCH VOLUME AMONG PUBLIC UNIVERSITIES

No.5 IN RESEARCH VOLUME AMONG PUBLIC UNIVERSITIES

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