

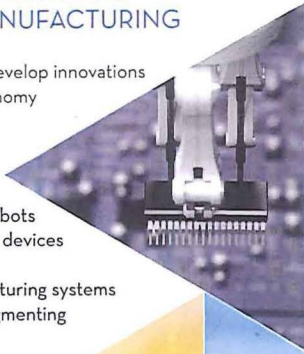


ROBOTICS, SENSORS AND ADVANCED MANUFACTURING

Leveraging strengths in STEM fields to develop innovations in key industries that will propel the economy forward and fulfill workforce needs.

Partnership opportunities

- Agricultural robotics
- Reconnaissance and surveillance robots
- Medical robotics, including medical devices and simulators
- Industrial applications and manufacturing systems
- Human-robot collaboration and augmenting human performance
- Environmental monitoring
- STEM education



ADVANCING INDUSTRY, CONSERVING OUR ENVIRONMENT

Research-based solutions to environmental challenges in support of sustainable economic growth.

Partnership opportunities

- Wastewater treatment and water reuse
- Sustainable treatment of agricultural runoff and drainage
- Bioremediation of mining waste
- Bio-reclamation of industrial waste

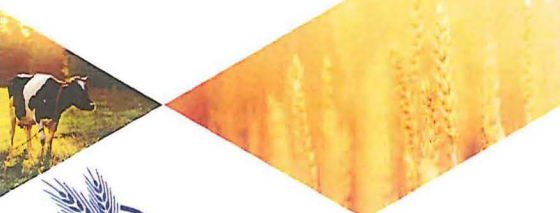


GLOBAL FOOD VENTURES

Partnering research, agriculture and industry to develop sustainable solutions for securing the global food supply.

Partnership opportunities

- Supply chain analysis
- Detection and surveillance of existing and emerging plant, human and animal pathogens
- Novel food processing and preservation solutions
- Holistic animal health and welfare studies
- Integrated policy analyses
- Consumer education and outreach



DISCOVERIES AND TREATMENTS FOR BRAIN CONDITIONS

Partnering with industry to develop new treatments for brain conditions that improve human health and quality of life.

Partnership opportunities

- New technologies and applications for deep brain stimulation
- Optogenetics: using light-sensitive proteins to control neurons
- Closed-loop control systems using brain-machine interfaces
- Clinical applications and integrated methods for patient care
- Identifying the benefits of neuromodulation for other disorders



MnDRIVE

Minnesota's Discovery, Research and InnoVation Economy

Discovering solutions to our greatest challenges



UNIVERSITY OF MINNESOTA
Driven to Discover™

About MnDRIVE

In 2013, the Minnesota Legislature authorized an \$18 million annual investment in four University of Minnesota research areas, reflecting a marriage of the U of M's distinctive strengths with the state's key and emerging industries. The investment, called Minnesota's Discovery, Research and InnoVation Economy (MnDRIVE), is a landmark partnership between the university and the state of Minnesota.

By aligning areas of university strength with opportunity and need, the goal of MnDRIVE is to foster innovation, cultivate strategic business collaborations, advance Minnesota's economy and enhance the university's ability to produce breakthrough research that addresses our state's and society's greatest challenges. In other words, the university is conducting research that our premier industries can use to help address these grand challenges on the state, national and international stage.

We welcome your participation in this new endeavor and are excited to see what we can accomplish together.

Research focus areas



Robotics, sensors and advanced manufacturing



Global food ventures



Advancing industry, conserving our environment



Discoveries and treatments for brain conditions



MnDRIVE
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CONTACT US

Office of the Vice President for Research
101 Pleasant St. SE, Suite 420
Minneapolis, MN 55455
612-625-6358 | 612-625-1927

University Economic Development
200 Oak St. SE, Suite 230
Minneapolis, MN 55455
612-626-3438

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ovprcomm@umn.edu.