Guest column: Innovation is key to economic revival and prosperity

By Michael Jandernoa

Innovation is the backbone of the American economy, and for entrepreneurial innovators to bring ideas to market, they need new discoveries.

Michigan’s economy was powered for much of the past century by businesses building on technological breakthroughs, turning ideas into wealth-building machines. Today, that raw material for innovation often comes from basic research done at our universities and major federally funded laboratories — and Michigan is fortunate to have landed one of those laboratories at Michigan State University.

The U.S. Department of Energy Office of Science, in the final days of President George Bush’s administration, decided to give Michigan an opportunity to develop and build the half-billion dollar Facility for Rare Isotope Beams (FRIB). This facility will leverage the proven track record of discovery and innovation developed by the National Superconducting Cyclotron Laboratory (NSCL) at MSU, which includes pioneering work in technology now used routinely to treat cancer.

FRIB has been described as a game-changer for Michigan, putting our state on the map as an important center for major research and development in this fascinating area. These isotopes have uses in national security, medicine, materials science and more.

FRIB isn’t just important for the Lansing area. West Michigan students and researchers are welcome at FRIB — in fact, Hope College students and professors joined others from around the nation to build an important neutron detector at NSCL, and will continue to be engaged in research once FRIB comes on line.

A study by the Anderson Economic Group shows FRIB will bring more than $1 billion in economic activity to our state over the next 20 years. More than 850 researchers from around the globe already have joined the FRIB Users Organization, offering their input into its development. Many already have visited mid-Michigan to participate in
planning sessions and prepare for research projects that will take place when FRIB is completed in 2020.

Perhaps more important and exciting to those of us interested in investing in companies with potential to grow in Michigan, NSCL has spawned spin-off businesses. FRIB can be expected do the same. The Department of Energy’s Small Business of the Year award recently went to Niowave, founded by former NSCL researcher Terry L. Grimm. The company, which is the only one in the world to design, build and test a superconducting electron acceleration in its own operations (a former school just north of downtown Lansing), is winning millions of dollars in contracts as it commercializes knowledge gleaned from research conducted at NSCL.

The basic research these physicists are undertaking rarely is attempted by business today. Companies would rather develop an established piece of science than take on the risky, speculative business of basic research. But without the knowledge that comes from basic research, innovation stops, companies become stale — and nations become weak.

Throughout the ages, nations that have nurtured technology and research have led the world, economically and militarily. One study by the National Bureau of Economic Research found 73 percent of applicants for U.S. patents said public funded research formed the basis for part of all their innovations. Without that research, the number of patents will plummet.

That’s why it is vital, even as we get our nation’s spending under control, that we continue to fund facilities such as FRIB. They are the seed corn of our future economy.

Michigan’s congressional delegation has been strong supporters of FRIB. They worked together to ensure that MSU and Michigan had the chance to be selected for FRIB, and they have backed funding for the current development stages.

As construction starts in 2012, FRIB will need additional federal funding. It is in the interests of Michigan — and the United States — to ensure that FRIB can be completed by 2020 and start bringing out new research that can be commercialized.

FRIB is a part of Michigan’s economic revival — and a piece of our nation’s future prosperity.

Michael Jandernoa is a member of the Facility for Rare Isotope Beams Leadership Advisory Committee, a group of state leaders who are providing counsel and assistance to MSU on FRIB. He is former CEO of Perrigo Co. and general partner in Bridge Street Capital Fund. He lives in Grand Rapids.

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