

## Minnesota is improving early stage capital

Angel investor tax credits and several newly announced early stage capital funds are two critical elements helping Minnesota's entrepreneurs find early stage funding for their Minnesota companies.

There is a fervor mounting to encourage angel investors to invest in Minnesota's early stage companies. A growing, coordinated coalition of Minnesotans is pushing for the Legislature to (finally!) approve an angel investor tax credit. Numerous articles have been published about this subject: [Angel investment tax credit in Minnesota: The Burden of Proof, Shocker! Angel investment tax credit drive in Minnesota hits snag, Legislative session will feature competing angel investor bills, Roundtable: 'Angel' tax credit could help boost next-gen tech in state, House research report questions usefulness of investor tax credit, Push is on for tax credit to spur high-tech business growth.](#)

In partnership with LifeScience Alley, Economic Development Association of Minnesota (EDAM), Twin City Angels, Halleland Consulting, Minnesota High Tech Association and many others, BBAM is playing a strategic role to provide statewide support for bills (S.F. 2307/H.F. 2750) authored by Senator Kathy Saltzman and Representative Jim Davnie. According to a co-author of the bill, Representative Tim Mahoney's office has received letters of support from approximately 100 individuals, organizations or companies from 38 legislative districts as of February 8.

There is optimism about this being the year Minnesota passes this legislation, but the state is also facing an unprecedented fiscal challenge. If you are passionate about seeing the bill pass, please call your legislators.

To complement the work being done

at the Capitol to spur angel investing in Minnesota, BBAM has been working for almost three years to attract new early stage funds to Minnesota. We are ecstatic at the recent announcements by: 1) Burrill & Company's investments in two Minnesota companies, Segetis and Nora Therapeutics, and their continued work to raise a venture fund in Minnesota; 2) [Coordinate Capital](#)'s work to raise an early stage fund in Minnesota; 3) Triathlon and Affinity's recent announcement of a \$25 million early stage fund being raised. Also, there was recent press coverage about a new [University of Minnesota fund](#) which is a positive complement to the other early stage funds.

Minnesota has reason to be optimistic and BBAM is proud to play a central part in improving the overall business environment for early stage biobusiness companies.

## BBAM's trip to Elk River Energy City

Not long ago, BBAM had the opportunity to visit Elk River Energy City. Touring three facilities, the Landfill Gas Electric Generating Plant, Elk River Refuse Derived Fuel (RDF) Processing Plant and Great River Energy, BBAM experienced how Elk River is dealing with energy and waste.

The first stop on the tour was the Landfill Gas Electric Generating Plant. It's a cooperative venture between the Elk River Landfill, Waste Management, Elk River Municipal Utilities and Sherburne County. The plant takes the methane gas, created from the landfill, and converts it to electricity. It currently supplies the energy needs for approximately 2,400 homes in Elk River.

The second stop was the Elk River RDF

Processing Plant, operated by Resource Recovery Technologies, LLC (RRT). Of the 750,000 tons of waste material handled by RRT each year, over 85 percent is processed into RDF. The resulting electricity, which is used by Great River Energy, our third stop, is enough to power 55,000 homes each year.

"We are trying to educate people on energy and waste," said Rebecca Haug, Energy City Administrator. "Our tours demonstrate innovative ways of dealing with both issues."

BBAM would like to say thank you to the city of Elk River for hosting

our visit and to invite our stakeholders to learn more about this exciting community. Visit [www.elkriverenergycity.org](http://www.elkriverenergycity.org) for more information. Also, check out the Fourth Annual Energy Expo on February 27, 2010. More details about this event can be found at the link above.



Above: Refuse Derived Fuel (RDF) storage facility at Great River Energy.

# Douglas Scientific transforms laboratory screening

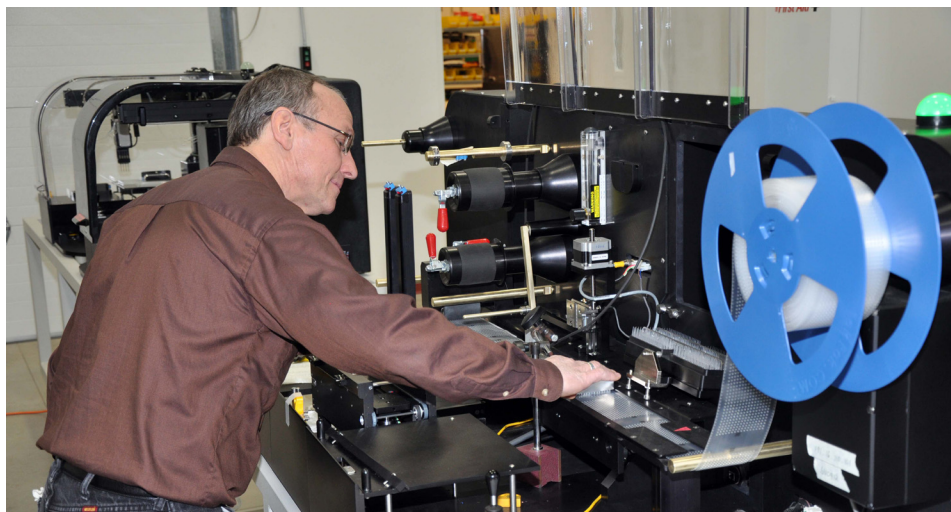


Douglas Machine Inc. of Alexandria, Minnesota has been a known leader in automated packaging equipment for the largest consumer brands in the world since 1964. Not surprisingly, the company has now staked out a remarkable position in the biotech industry with its subsidiary company, Douglas Scientific LLC.

Douglas Scientific provides patented Array Tape™ automation for scientific laboratories that screen high numbers of genetic samples and chemical compounds. Traditionally, scientists have performed such screening using microtiter plates, which require significant investments in robotics, automation and consumables.

Guided by the engineering heritage and motion control expertise of its parent company, Douglas Scientific designed laboratory instrumentation -- Nexar™ and Araya™ -- that optimize dispensing and scanning in a thin, continuous Array Tape™ media with tiny embossed wells. The technology allows scientists to complete screening at profound throughput gains and fractional costs, which are fundamental constructs to support the escalation of scientific screening and discovery.

The patented Array Tape™ technology is a direct extension of the carrier tape technology that propelled manufacturing processes in the micro-electronics industry during the rapid growth period of the 80's and 90's. The pioneer of that revolution was a Twin Cities entrepreneur – the late Jim May – who founded Advantek, which became the world leader in carrier tape automation for electronics. Not surprisingly, Mr. May sought to replicate his success in the next emerging market – biotech – with carrier tape to complete genetic and compound processing. He founded Global Array, which has



Above: Mike Christensen, an engineer for Douglas Scientific, demonstrates how the equipment works.

since merged with Douglas Scientific to comprise a complete platform for high throughput screening.

Array Tape™ technology, and specifically the Douglas Scientific patented automation, received a high level of validation at the recent Association of Laboratory Automation event in Palm Springs, CA in January. Pioneer-DuPont presented the laboratory outcomes it has achieved using the Douglas Scientific platform in its high throughput genetic marker labs. The trade event was attended by more than 4,100 scientists from 40 countries.

Dan Malmstrom, President of Douglas Scientific offered these remarks, “It is an exciting time for Douglas Scientific. We are delivering a provocative platform for scientific discovery, where it is not uncommon for our laboratory clients to experience a 10-fold throughput gain while reducing their processing costs by 70-90 percent.”

Array Tape™ enables much lower reaction volumes, which drives savings on chemistry and reagents. Motion and robotics are minimized with the inline model, and the cost of microtiter plates is significantly reduced with Array Tape™.

The company has now deployed its products on several continents and has experienced significant revenue and employment growth. This prompted con-

struction of a new 40,000 square foot facility to support operations. The common tag line of parent Douglas Machine Inc. couldn't be more true for its newest venture Douglas Scientific...” more than a machine”. Learn more at [www.dougllasscientific.com](http://www.dougllasscientific.com).

## Meet BBAM's New Staff Member



Tim Welle, Program Manager  
Hometown: Freeport, Minnesota

Tim is interested in the new and innovative uses of natural resources that will help Minnesota lead the path toward the new economy, especially within the Renewable Energy and Renewable Materials industries.

*“At the end of the day, I hope my work serves to make the state a better place through the creation of jobs, a cleaner environment, and a strong agricultural sector.”*  
– Tim Welle