Jeremy Lenz, chief operations officer, BioBusiness Alliance of Minnesota, Lynne Osterman, executive director, MN Nano

Civic Caucus, 8301 Creekside Circle #920, Bloomington, MN 55437

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Notes of the discussion

Present : Verne Johnson (chair), Dan Loritz, Tim McDonald, Jim Olson (phone), Wayne Popham (phone)

A. Welcome and introductions - **Jeremy Lenz** is Chief Operations Officer of BioBusiness Alliance of Minnesota, which he helped to start in 2004. He is the vice chair of the board of University Enterprise Laboratories, a Minnesota bioscience incubator, and a judge for the Minnesota Cup, Minnesota's largest business plan competition.

In 2006 Lenz received the American Marshall Memorial Fellowship from the German Marshall Fund and in 2008, he received the Minneapolis/ St. Paul Business Journal's '40 under 40' award. He received his MBA from the Carlson School of Management in 2009.

Lynne Osterman is Executive Director of MN Nano, a statewide coalition of industry, higher education institutions, government entities, service providers and investors with a common goal of establishing Minnesota's standing as a region of excellence in nanoscience.

Osterman served as a member of the Minnesota House of Representatives (R-New Hope) from 2002 to 2004. Her legislative focus was workforce development and job creation, with much of her time spent on issues related to development of the bioscience community in Minnesota. She has subsequently worked as a lobbyist and served on the boards of several organizations including the Northwest YMCA, BioBusiness Alliance of Minnesota and the state's Job Skills Partnership board. She has her own legislative advocacy firm, Minnesota Governmental Pursuits, and serves as the Executive Director for MN Nano.

B. Discussion - The speakers opened their remarks with what is common to the efforts of their organizations. Both aim to retain and expand employment and commercialization across the science- and technology-focused sectors of Minnesota's economy.

Lenz said that the goal of the BioBusiness Alliance is to focus specifically on the bio-business sector of Minnesota's economy. They seek to do this by paying attention to the different areas of what he and Osterman call the "life science community" of the state.

When both the retention and recruitment of companies are going well, the speakers said, it creates a "honey effect," attracting more people involved in the industry. But when retention and recruitment are going badly, as in Detroit, communities need to pay a premium to attract businesses.

The life science community in Minnesota is diverse.

To make the complex grouping of life science industries easier to understand, and to target support, Lenz said the Bio Business Alliance, with help from colleagues at MN Nano and elsewhere, have developed the following outline of the life science community in the state:

Industries: There are six basic industries in Minnesota's life science community, Lenz explained. These are medical devices, biologics/biopharmaceuticals, animal health, food, renewable energy, and renewable materials. Minnesota is unusual in that all these industries operate in close proximity.

Commercialization Catalysts: The state also has community infrastructure, including leadership talent, skilled workforce, funding, academic capability, acceleration/incubation, international business support, and component/service suppliers.

Enabling Knowledge Clusters: Lenz said that it is important to seek the areas where Minnesota already is a global leader and can build from an existing foundation. These areas, which he terms "enabling knowledge clusters," include bio and chemical, nanotech and materials, bioengineering and clinical capabilities, bioinformatics and systems biology, genomics, and imaging/navigation.

Fundamental components: For the science- and technology-focused sectors to work effectively, the speakers said, the basic elements of education, infrastructure, and policy must be in place. This is where public officials can best direct their attention.

A resource is now available to locate bio-industry resources.

Seeking to help people understand the bio industry in Minnesota, the BioBusiness Alliance built a database and an associated interactive map that enables an interested person to perform searches by industry and resources. It may be found on the Alliance website at: http://www.biobusinessalliance.org/biomap.asp .

"I personally wanted to be able to go to a city council and tell them who is in their area," Lenz said. There are many components to a life-science economic cluster, and it is often not clear which of these components is available in a particular region (labs, for example, or packagers) or where else they might be.

Minnesota needs a business plan as a state.

"The question facing state leaders has to be whether Minnesota has a business plan," the speakers said. Lenz described listening to the CEO of 3M criticizing the state on its tax climate. That's important, he said, but only one of the factors affecting growth. The state spends a lot of money each year and "If you put yourself in the position of CEO of the state, and have the authority to allocate resources, what do you do?"

Today the state does not have a vision to guide that allocation, the speakers said, nor has it had one for some time. In response to a question about the current absence of a state planning agency, they agreed that it would be very valuable to reestablish such a state function.

Osterman said that when she and fellow freshman legislators went to their orientation they were given Department of Revenue presentations based solely on what was done the year before. She had asked, "So when do we talk about the future, or about planning?" She felt there was little sense of planning or thinking about the future.

Absent public sector leadership, the private sector is moving ahead.

The speakers agreed that there is a need for state leadership. If you were to gather public and private leaders, they said, and ask them what the vision of the state is, there would be no response.

"I've learned not to ask if we have a plan," Osterman commented, "because the answer is no. I now just start from that assumption."

The private sector effort of BioBusiness Alliance and MN Nano, the speakers said, is an attempt to transition from a situation with cities trying to sell their strengths individually to one with the state having a single, coherent message.

Lenz described a conference where a Minnesota town was giving a pitch about their business climate. "Yet the people at the conference were looking for specific animal health assets, not what a particular town is pitching as its individual business climate."

The BioBusiness Alliance grew out of the need for leadership.

Osterman described a council that then-Governor Pawlenty had appointed to work on economic development. She saw that it was likely that the people involved would "not be empowered to make any real inroads in regard to creating a true "plan" for bioscience advancement in the state." She worked with Lenz and then-Mayor Randy Kelly in St. Paul to urge then-Governor Pawlenty to support the creation of what eventually became the BioBusiness Alliance of Minnesota, utilizing a business plan that Lenz had co-authored for the City of Saint Paul.

As the state competes for business, we need to address the basic question: Is the region positioned to do what we need to do for the life sciences industry to thrive, and how are we stacking up against other areas?

Nano technology is an area with strong potential for growth.

Nanotechnology leverages, or applies the findings of, nanoscience, Osterman said, which is the science of extremely small materials. It involves the study of material that goes beyond the molecular level to the atomic level. For instance, the wings on Boeing's new 787 Dreamliner are made from a composite material impossible to create only 20 years ago, because we couldn't manipulate materials at that scale.

Minnesota has many companies leveraging nanotechnology that could benefit from greater interconnectedness and exposure, she said. MN Nano is seeking to establish a new resource by February of 2012 that will feature all Minnesota companies utilizing nanotechnology. The companies are spread across all of the state's vertical sectors, i.e. the various business sectors addressing very particular or niche markets. This new tool, "NanoVox," is intended to create opportunities for technologists within those verticals, to learn about each other and to offer ways for them to collaborate with each other as well as with other private-sector and academic researchers across the entire five-state region (Wisconsin, Iowa, Minnesota and the Dakotas).

Post-secondary institutions are responding to needs and opportunities.

There are a lot of very creative administrators among the technical schools and colleges, the speakers said. St. Cloud State has created a world-renowned regulatory affairs program. MNSCU has established specialty training programs tailored to the industries. There is hope that these institutions will work with the Alliance to respond further to the high-value job opportunities this industry brings to the state.

C. Closing

Adopt a private sector 'dashboard' of indicators that outlasts changes of administration.

In closing the speakers said that they are excited that Governor Dayton might be adopting an economic "dashboard," i.e., an executive information system that is designed (as an automobile's dashboard) to be easy to read. Such a "dashboard" would be used to monitor the state's economy and component industries.To gauge exactly how well the state is performing overall, a digital dashboard would capture and report specific data points from various industries in the state, thus providing a "snapshot" of performance.

A dashboard can help decision-makers know where the state stands at a particular moment, Lenz said. Viewing the economic components at that macro-level, if some indicators are off you can focus on those to examine what's going on that might be turned around.

The private sector leadership is critical because it is more of a constant than government oversight with all its political swings, Osterman added. The dashboard model, though, could provide a consistent means of assessing the state's performance.

Thank you to our speakers for a good session.