

Partnership News

Partnership Announces Next Round of Research

The Partnership is awarding \$7.5 million in state-funded support to four new research teams and one infrastructure support project in the third round of research awards since 2003. It has also awarded \$1 million to one of the first research teams to take discoveries toward commercialization.

The research awards include three separate projects on Alzheimer's disease, two of which build on the work of one of the first round research teams. The fourth project focuses on skin disease. The infrastructure funding will support innovations in bioinformatics. The commercialization award supports advancement of yet another first round project, on prostate cancer, taking those discoveries closer to the marketplace. The funding is part of the \$15 million

investment in operational support the Partnership received from the Minnesota Legislature in 2006. The remainder of that investment is being allocated for recruiting top scientists in Minnesota.

To read about these new research projects and the commercialization project, go to: <http://www.minnesotapartnership.info/pressreleases/2007-0327/> □

"These research projects reflect both innovative, new ideas, as well as Partnership advancements that bring us closer to real cures and treatments. Clearly we continue to focus on our research strengths and major issues confronting Minnesotans – including Alzheimer's and cancer."

— Frank Cerra, M.D., Senior Vice President for Health Sciences, University of Minnesota

"This third round of awards is a clear sign that bipartisan support of the Minnesota Partnership is paying off not just for the state of Minnesota, but for the state of medical science. The fact that we are now building on the discoveries of first-round projects and advancing them toward the marketplace is proof that the Partnership is living up to its promise."

— Glenn Forbes, M.D., CEO, Mayo Clinic, Rochester

Research Facility a Reality: Governor Says Look Beyond Today



On January 26, Gov. Pawlenty helped dedicate the Partnership's new comprehensive genomics research facility in the Vincent Stabile Building in downtown Rochester. The three-story addition to the building includes bioinformatics, the Advanced Genomics Technology Center and proteomics research labs as well as additional support space for Partnership

research. The building project is the result of a \$21.7 million bonding issue approved by the Minnesota Legislature.

At the ceremony, Gov. Pawlenty set the stage for the Partnership's next steps asking the crowd of legislators and Mayo and University staff to "put another marker out there for what this partnership looks like *beyond, significantly beyond* where it is today." The Governor also said the Partnership is strategically important "to what we are trying to do in the State of Minnesota."

Glenn Forbes, M.D., CEO, Mayo Clinic, Rochester also welcomed the audience, and noted that "what you are seeing up here is just a fraction of what is to come. It is really a benefit for moving our entire state forward as a leader for the bio-sciences and bio-technology."

Frank Cerra, Senior Vice President for Health Sciences, University of Minnesota said "these two institutions working together are transforming academic medicine in the State of Minnesota. It is changing the mental models and is beginning to extend beyond research into areas of workforce production and education. It is simply fantastic, and it exceeds all expectations."

To read the full press release on the opening, go to:

<http://www.minnesotapartnership.info/pressreleases/2007-0125/> □

Partnership Hosts 2007 Bioscience Conference



In January, the Minnesota Partnership hosted "Minnesota's Future in the Biosciences: Where are we today and where can we go tomorrow?" a conference on Minnesota's future in the biosciences industry. The goal of the half-day session with members of the Minnesota House and Senate, members of the administration and those working in the biosciences was to raise awareness of Minnesota's potential in the biosciences

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Your Support Matters

If you are intrigued by what you've read about the Minnesota Partnership for Biotechnology and Medical Genomics and would like to learn more or show your support, visit our Web site. If you or someone you know has benefited from medical advancements in biotechnology or medical genomics, please share your story with us.

Spotlight on Research

Solving the Mystery of Autoimmune Diseases with Biomarkers



Erik Peterson, M.D., University of Minnesota
Ann Reed, M.D., Mayo Clinic

Autoimmune diseases result when the body's immune system, which normally protects against invading organisms such as bacteria and viruses, turns against a person's own tissues. This Partnership team is using new and exciting technologies, that allow them to view the expression of thousands of the genes within a tissue on a single silicon chip — all at one time — similar to the chips inside computers. At the University of Minnesota, researchers applied this new chip technology to the blood cells of patients with various human diseases, and discovered gene expression "signatures" that are seen essentially only in people with certain diseases, not in healthy individuals. This lets scientists to look at the levels of dozens of proteins in blood.

Mayo Clinic's rheumatology group sees approximately 12,000 patients annually — a total of 80,000 visits per year. This large and diverse patient

population with rheumatic diseases offers a unique clinical resource for blood cell chip technology. The researchers are targeting four disorders: Myositis, an inflamed and weak muscles; psoriatic arthritis, a type of arthritis associated with skin psoriasis; systemic lupus, a type of blood vessel inflammation that affects young women and can lead to arthritis, kidney and brain inflammation; and rheumatoid arthritis, a common type of arthritis that can be crippling.

Preliminary data suggests that each of these autoimmune diseases has a characteristic blood gene expression signature. The Partnership team is analyzing these patterns of gene expression as a means to predict clinical outcomes and provide new insights into the pathophysiology of autoimmunity. The results should be clinically useful tests that will lead to better diagnosis of these diseases, an improved ability to predict whether patients will do well or poorly with certain treatments, and eventually, a means to identify new and improved therapies for these disorders.

Bioscience Conference continued ...

and to discuss the next steps for a Minnesota's biosciences strategy.

Bioscience expert Simon Tripp, CEO of The Impact Group, presented the latest research on Minnesota's bioscience industry. He offered insight into Minnesota's position in the biosciences. (see *Economic Impact Study* at right).

A panel discussion of Minnesotans operating bio-businesses in Minnesota highlighted the economic and job-creation benefits the state's already receiving from the industry. Vin Weber and Vance Opperman concluded the event by moderating an interactive audience discussion.

Conference attendees also received an update on the work of the Minnesota Partnership, which in just three years has become a nationally recognized model of collaboration for advancing medical research. Overall, it was clear that participants would like to see Minnesota advance its position in the biosciences, and the exciting and prosperous future our state can have in the industry.

To read more about the conference and see the presentations made at the conference, go to:

<http://www.minnesotapartnership.info/bioscience-conference.cfm> □

Economic Impact Study

Already Generating Positive Returns

Simon Tripp, President of The Impact Group, conducted an updated economic impact study of the Minnesota Partnership and Minnesota's position in the biosciences industry that addresses our strengths, challenges and opportunities. The Impact Group is an economic impact research firm that has tracked bioscience development potential for companies, industries, states and countries around the world.

The report shows that Minnesota is building upon its long track-record in bio-medical devices, and is working to invest in initiatives that will broaden its bioscience portfolio and expand the state economy.

Further, he found that the Minnesota Partnership, while only engaged in formal R&D projects for two years, is already generating positive scientific, economic and healthcare impacts for Minnesota. Tangible research results, technologies and innovations are already starting to flow from the Partnership's initial research programs and the Partnership is receiving widespread recognition for its multi-institutional, multi-disciplinary, collaborative model and highly influential scientific outputs. To read an executive summary of the report and the full report go to:

http://www.minnesotapartnership.info/economic_impact/eqs.cfm □

The Marketplace

Minnesota has all of the key components for success, according to the National Governors Association (NGA). The NGA, the bipartisan organization of the nation's governors, found that to do well in the biosciences, states must be:

Innovative — Having a strong intellectual infrastructure, such as universities and public or private research laboratories that generate new knowledge and discoveries

Collaborative — Having efficient mechanisms through which knowledge is transferred from one person to another or from one company to another

Invested in infrastructure — Having the advanced R&D, communications and physical infrastructure required to compete

Strong in talent — Home to a highly skilled and adaptable technical workforce

Well-funded — Able to access good sources of capital for risk investments and the funding of commercial growth.