

10 YEARS... THE FUTURE FROM WITHIN

2008

1999 2000 2001 2002 2003 2004 2005 2006 2007 **2008** 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

NDSU RESEARCH + TECHNOLOGY PARK | **ANNUAL REPORT**

The NDSU Research & Technology Park, Inc., (RTP) is a 501(c)(3) corporation created to provide university researchers and private industry a central location to combine their talents to develop new technologies, methods and systems. It covers 55 acres on the north end of the NDSU campus in Fargo, N.D. The RTP, a member of the Association of University Research Parks, is led by an executive director and a 10-person board of directors.

Mission

The NDSU Research & Technology Park (RTP) operates to enhance the investments in North Dakota State University by the citizens of North Dakota. Through partnerships with international, national and regional centers of excellence, high technology-based businesses, and the research community at NDSU, the RTP will achieve successful technology-based development and broaden the economic base of North Dakota. Scientific and technological advancement will be promoted through the development of facilities and research centers conducive to cutting edge research. The Park will establish an innovation accelerator unit which offers space, facilities and services to technology-based entrepreneurs and businesses.

Objectives

- To operate for the benefit of NDSU by assisting the university with its teaching, research and public service missions.
- To achieve successful, technology-based economic development.
- To create a technology incubator that will be mutually beneficial to NDSU and North Dakota by assisting entrepreneurs, start-up businesses and existing businesses with new ventures.
- To provide RTP occupants access to research, development and problem-solving resources at NDSU.
- To create a business environment dedicated to applied research and technological discovery for the benefit of NDSU faculty, staff and students.
- To provide a pool of professionals as a resource for teaching and applied research and development at NDSU.
- To facilitate the transfer and application of scientific research to the global economy.
- To promote economic development in Fargo and North Dakota, enhance the value of North Dakota citizen's investment in NDSU and enhance the state's economic base.
- To pay out and distribute funds to NDSU for scientific investigation, research, technological advancement and educational opportunities.

Vision

The NDSU Research & Technology Park serves as a catalyst for innovation in science and technology leading to discoveries that contribute to North Dakota's economic development.



Dr. Joseph A. Chapman



Tony S. Grindberg

The Future From Within

Creation, Engagement, Results

A remarkable journey began on Dec. 30, 1999, with bold signatures on a document that, in essence, created the NDSU Research & Technology Park. That day, the forward thinking of highly creative and courageous individuals established one of the most successful public/private partnerships in the United States. The coming year will mark a decade of excellence and accomplishment. We've planned many events over the course of the year to commemorate this milestone and highlight the results that have been achieved. It is also a time to honor the people who contributed with distinction.

One does not have to look very far to witness the many partnerships. Our partners in the private sector include Phoenix International, Alien Technology, Killdeer Mountain Manufacturing and Bobcat. The synergy of USDA, Valley City State University, North Dakota State College of Science and Dickinson State University will advance rural-based services for entrepreneurs. A new partnership with the city of Fargo, the North Dakota Department of Commerce, NDSU Research Park Ventures, LLC, and 11 banks in our community created a financing tool that will advance infrastructure in the Park. The first project involving the NDSU Research Park Ventures Fund assisted Appareo Systems and NDSU in constructing the seventh facility in the Park, which is scheduled to open the summer of 2009.

The new Appareo Systems-NDSU facility epitomizes the public/private collaboration that flourishes here at NDSU. The Technology Incubator provides companies like Appareo Systems, Pedigree Technologies and other tenants with value-added services that enhance North Dakota's economy. These services include business planning, logistics and human resources.

In August 2008, the annual payroll of the 96 employees operating in the Incubator totaled more than \$5.8 million. We anticipate that, during the next decade, our efforts will provide services to more than 100 new technology-based businesses in North Dakota.

Thank you for your interest, support and confidence in the NDSU Research & Technology Park. To learn more about the exciting partnerships and services, please check out our website at www.ndsuresearchpark.com. The journey continues!

Sincerely,

Dr. Joseph A. Chapman
President, NDSU
President, NDSU Research & Technology Park Board of Directors

Tony S. Grindberg
Executive Director
NDSU Research & Technology Park

RTP

NDSU Research & Technology Park

Our Tenant-Client Partners

The RTP and the Technology Incubator are home to fast-paced, high-growth companies that promote economic development in North Dakota. Each of them either has the potential to compete globally or is already doing so effectively. To operate within the RTP, a company should be involved in the advancement and development of new technology, be willing to establish a working relationship with NDSU and work in one or more of the following technology fields:

- **Material Sciences**
- **Biosciences and Life Science Technology**
- **Information Technology**
- **Nanotechnology**
- **Advanced Manufacturing and Sensors/Micro-Electronics**

RTP Tenants

Alien Technology® provides UHF radio frequency identification (RFID) products and services to customers in retail, consumer goods, manufacturing, defense, transportation and logistics, pharmaceuticals and other industries. Organizations use its products and services to improve the effectiveness, efficiency and security of their supply chains, logistics and asset tracking operations. Alien's products include RFID tags, RFID readers and related training and professional services.

Appareo Systems, LLC, is a growing company with more than 100 years of combined experience in electronics design and engineering. As a leader in the burgeoning field of augmented reality, the company is focused on creating advances in flight data recording and analysis. Appareo employs 33 full-time employees and several student interns. *(see story on page 4)*

Bobcat®, an anchor tenant of the Technology Incubator, is a leader in the design and construction of compact equipment for the industrial, construction and agribusiness industries. The company employs 20 people in its research and development facility.

NDSU Candlewood Suites, operated by Sonmar Management Corp., is a \$4 million extended-stay hotel with 72 guest rooms intended primarily for visitors conducting business at the RTP or on the NDSU campus. The hotel employs students and includes a classroom for courses in Hospitality & Tourism Management.

The **NDSU Center for Nanoscale Science & Engineering (CNSE)** is the only facility in the nation with all the technologies and equipment necessary for electronic miniaturization under one roof. CNSE scientists and engineers conduct interdisciplinary research and design at the atomic-molecular scale that is focused on practical materials, processes and devices.

The **NDSU Department of Coatings & Polymeric Materials** is a national leader in developing new materials for NASA, the U.S. Department of Defense and private industry. It includes the only Corrosion and Coatings Research Center in North America.

The **NDSU Office of Research, Creative Activities & Technology Transfer** facilitates research and creative activities across campus. It assists faculty in seeking and submitting proposals for research funding and fosters partnerships with government and private business. It includes the Office of Sponsored Programs Administration, the Office of Technology Transfer, the Office of Federal Government Relations and the Center for High Performance Computing.

The **NDSU RFID and Wireless Sensor Laboratory**, housed in the Technology Incubator, is part of the Center for Nanoscale Science and Engineering. The lab provides testing capabilities and support for research and development partnerships between NDSU, industry and government in RFID technology areas. *(see story on page 9)*

Phoenix International, a John Deere® company, designs and manufactures highly rugged, customized and integrated electronic components and systems. *(see story on page 6)*

Technology Incubator Clients

Avenue Right provides leading-edge advertising services utilizing robust Internet and database technologies to boost productivity and streamline the current manual processes for planning, evaluating, and buying advertising media.

The **Fargo-Moorhead Angel Investment Fund** is a Regional Angel Investor Network (RAIN) Fund for start-up ventures in Fargo-Moorhead established by a group of local investors working with RAIN Source Capital. RAIN Source Capital is a multi-state network of RAIN funds that works with angel investors interested in supporting growing companies. It provides investment capital, a process for due diligence, legal templates, management support, access to deal flow and other resources. The F-M RAIN Fund focuses on growth companies. Students working in the Technology Incubator through Entrepreneurial Scholarships *(see story on page 12)* earn real-world experience and provide value to companies by completing due diligence for fund investment requests.

Feed Management Systems™, Inc. is an award-winning software company that provides integrated business management technology for the global animal feed manufacturing industry. The company's software solutions help ensure the safety, quality and affordability of the global feed supply by helping manufacturers manage and report their nutrition, formulation and production data and processes.

Intelligent InSites, Inc. is a leading provider of enterprise visibility solutions for the health-care market. The InSites Enterprise Visibility Platform™ improves operational performance by providing health-care organizations with a single system capable of locating patients, staff, equipment and inventory via information derived through a variety of wireless locating technologies. The information is then leveraged to streamline and automate patient flow, asset management and inventory management activities.

Pedigree Technologies is a leader in the machine-to-machine industry that designs and develops intelligent asset management systems. The company's "Oneview Platform," an advanced software and hardware system, unites sensor networking technologies with the World Wide Web. It enables organizations to deliver remote, real-time inventory, product and performance information, as well as post-sale support and response for replenishable assets, vehicles, machinery and equipment, and to do it from anywhere in the world.

Partners

Appareo Becomes First Incubator Company to Invest in its Own Facility in the RTP

Appareo Systems launched itself into the high-tech field of augmented reality in 2001. Now, with its high-flying success in the field, the company is an industry leader and one of the first graduates of the Technology Incubator.

Appareo founder Barry Batcheller moved the company into the RTP in 2003 and into the Incubator in May 2007. In September 2008, Appareo became the Incubator program's first graduate when it broke ground on a new, 40,000-square-foot office and manufacturing facility within the RTP. The new building is slated for completion in July 2009.

"Appareo is a perfect example of how a public-private partnership can prove highly successful," said NDSU President Joseph Chapman. "Appareo is a 'graduate' of the incubator facility here in the park, showing how effective that effort can be in assisting fledgling companies to prosper. The company's success highlights and reinforces the Research & Technology Park's mission to stimulate entrepreneurial growth."

Batcheller says Fargo-Moorhead, the state, the region and the world can expect big things from the rapidly growing company.

"We intend to concentrate our growth in the Fargo-Moorhead area, focusing on both engineering and manufacturing," Batcheller said. "As we continue to introduce paradigm-shifting products to the marketplace, we expect to see additional international recognition for Appareo, the Research & Technology Park and NDSU."

Building New Reality

The new facility is only the most recent big step for a company that has made a name for itself by taking giant leaps.

Appareo applies augmented reality to designing, manufacturing and supporting electronic, mechanical and software products for aerospace, defense and transportation industries. The technology combines real-world and computer-generated data in testing hypotheses, processes and equipment.

"Moving forward, most of our projects will involve differential global positioning systems and electronics design for spatial awareness products, which often utilize inertial measurement," said David Batcheller, director of quality, process and program management. "Regardless of the specific focus, every

project Appareo takes on will advance our capabilities in augmented reality."

Among Appareo's specific areas of focus are flight data recording and analysis. The company has created new technologies that enable any aircraft operator to increase the safety of day-to-day operations easily and inexpensively.

Aviation Week & Space Technology magazine named Appareo's ALERTS system, which is a comprehensive tool for recording and analyzing flight data, the 2007 Product Breakthrough of the Year. Other honors include the 2008 Harry T. Jensen Award for outstanding contributions to helicopter safety and reliability from the American Helicopter Association and the 2008 M. P. Koch award for significant advancements of hardware for safety and survival from the Space and Flight Equipment (SAFE) Association.

As the honors roll in, Appareo's growth continues on a steep trajectory of more than 200 percent per year. Between the spring of 2005 and the fall of 2008, Appareo grew from five employees to 36. The company expects to employ 40-50 by the time it moves into the new building next spring, and around 80 by the end of 2011.



The Partnership Continues

NDSU's interdisciplinary doctoral program in materials and nanotechnology (MNT) will occupy about half of the new Appareo building. The proximity of Appareo and the MNT program will be a boon for both groups, according to David Wittrock, dean of the NDSU College of Graduate and Interdisciplinary Studies.

"This is a tremendous opportunity for graduate students to work in a setting where they are exposed to the business world," Wittrock said. "Appareo will also benefit from having access to our very bright students."



(Top) In 2001, Barry Batcheller, president of Phoenix International, left, and Joseph A. Chapman, president of North Dakota State University, surveyed progress of construction on the first building in the new NDSU Research & Technology Park. Phoenix was a cornerstone tenant in the new building. (Bottom) In 2008, 10 years after the idea for the Park was put into motion, Batcheller, now president of Appareo Systems, and Chapman stand in front of the Technology Incubator, one of six completed buildings in the Park. Appareo's new building, when completed in the spring of 2009, will be the seventh.

Breakthrough



Phoenix International: A Cornerstone for Success

Phoenix International has come a long way since its inception in 1987. As the company has grown, its electronic solutions have helped customers around the world.

From agricultural equipment in the Red River Valley, to transmission controls in Frankfurt, Germany, to construction equipment in Sydney, Australia, and many places in between, Phoenix electronic components are helping to get the job done.

Phoenix, which became wholly owned by Deere & Company in 1999, is part of John Deere's Intelligent Mobile Equipment Technology Division and a recognized leader in the design and manufacture of custom, integrated electronic solutions for John Deere and other original equipment manufacturers.

Phoenix specializes in the design and manufacture of highly ruggedized electronic components and systems for industries in which equipment operates under the most adverse conditions, including applications in on-highway, agriculture, heavy construction, industrial control, and material handling. Phoenix's products include electronic controls, displays and user interfaces, sensors, and complete electronic systems such as vehicle integration and communications networks.

Phoenix's New Product Introduction Center (NPI) was built in the spring of 2001 as a cornerstone of the RTP. With approximately 300 technical and engineering personnel, the NPI Center's activities revolve around new product design and development, applying advanced technologies in creating and evolving processes, and the testing needed to make sure products can withstand the harsh environments they operate in as well as to meet customer needs.

Phoenix engineers work with the latest tools and software to design electronics that can withstand harsh environments.



"Phoenix International's decision to locate its NPI Center in the Park was truly instrumental to the formation of the RTP as a whole," said RTP Executive Director Tony Grindberg. "The company's commitment captured the vision of a true public-private partnership that continues to position Phoenix and NDSU in a global market."

A Remarkable Advantage

"We're proud to be the RTP's cornerstone tenant and to have a positive impact on technology-based economic development in our region," said Phoenix President Chuck Kaufman. "Locating the NPI Center here has been beneficial to the company and will continue to be as we look into the future."

Because Phoenix is an RTP tenant, its design team has access to the research, development and problem-solving resources of the NDSU Office of Research, Creative Activities & Technology Transfer, and its advanced technology group works with the Coating and Polymeric materials lab to do testing that Phoenix chooses not to perform. In addition, the company has access to equipment such as NDSU's scanning electron microscope.

"Access to this equipment and expertise helps us gain a greater understanding of new technologies and processes as they relate to our products before they are implemented at our manufacturing facility," Kaufman said.

Phoenix executives serve on several NDSU advisory boards, providing input into areas such as curriculum and programs, and several of the company's engineers teach at the university. Phoenix also recruits interns and graduates to work in various engineering disciplines.

"We have access not only to the RTP's leading-edge technology equipment, but also to promising students who want to gain real-world job experience," said Kaufman. "These are all real advantages for us."

Looking Ahead

"Phoenix is a successful part of John Deere with significant growth in our 20-plus years," said Kaufman.

As electronics and related technologies continue to progress, demand for Phoenix products and expertise continues to grow. Growth is driven by a number of factors, including "green" initiatives, emission regulations, the need for more productive and efficient equipment, hybrid technology and ongoing requests for more feature-based vehicles.

Kaufman said the company is well positioned to meet the demands and to continue to deliver on its vision "to improve the lifestyle and productivity of its customers through innovative electronic solutions."

Success

“TALENT ACQUISITION IS A PRIMARY FOCUS AS ENTREPRENEURIAL COMPANIES GROW AND THRIVE IN THE BUSINESS WORLD OF TECHNOLOGICAL ADVANCEMENT. IT DOESN'T MATTER WHAT THE 'CUTTING EDGE' PRODUCT IS; THE PEOPLE BEHIND THE INNOVATION ARE CRITICAL FOR THE ORGANIZATION TO SUCCEED.”

– SHARON MILLER, RTP TALENT SPECIALIST

The Talent Portfolio

A hundred crucial priorities vie for the top spot on the list of most important for a start-up company at any given time. Hiring talented people is always right up there, but allocating the time and resources to find them can be a challenge.

Now, RTP tenants and Technology Incubator clients can get years of human resource (HR) expertise and experience right here through a new offering called The Talent Portfolio.

RTP Talent Expert Provides an Edge

Sharon Miller, RTP talent specialist, started The Talent Portfolio in the spring of 2008 to allow clients to capitalize on her prior HR and recruiting experience. That includes positions at The Partner Channel, RDO Equipment, Microsoft and Great Plains.

The program offers her expertise on a consultant basis.

While she is available to assist all RTP organizations, Miller focuses on the entrepreneurial businesses in the Incubator. Companies contract with Miller in six-month increments to provide consulting services for a fixed number of hours per month per company. She assists with interviews, talent sourcing, job description development and offers recommendations.

“Since most small companies don't have an HR resource, I can act on their behalf and keep the recruiting processes moving forward,” Miller said. “For larger RTP companies, The Talent Portfolio can augment their HR efforts as needed, such as discussing high-level recruiting strategies.”

Typically, Miller focuses on recruiting professionals in the areas of development, sales, internships and executives, with developers as the top priority. While candidates primarily hail from the region, she has assisted with a number of relocations. For the three Incubator companies currently involved in the program, she has assisted with 25 new hires.

Talent

Anechoic Chamber Places CNSE in Elite Group

A new piece of testing equipment in the Technology Incubator has further elevated the RTP in the elite tier of high-tech research facilities in the nation.

NDSU's anechoic testing chamber, located in the radio frequency identification (RFID) wireless sensor laboratory (RWSL), provides a controlled environment for testing antennas, RFID tags and other types of communication links.

The chamber is a room-size metal box measuring 11 feet wide, 20 feet long and more than 11 feet tall. It is designed with specialized foam on the walls, floor and ceiling to absorb signals from outside electronic devices that could skew testing results. This allows researchers to measure the effectiveness - with highly accurate and dependable results - of many different types of antennas in equipment like cell phones and wireless computer products.

That exponentially increases the value of the RWSL, which is part of NDSU's Center for Nanoscale Science and Engineering (CNSE), to Incubator clients and other high-tech companies that rely on precise testing to improve manufacturing processes and cut costs.

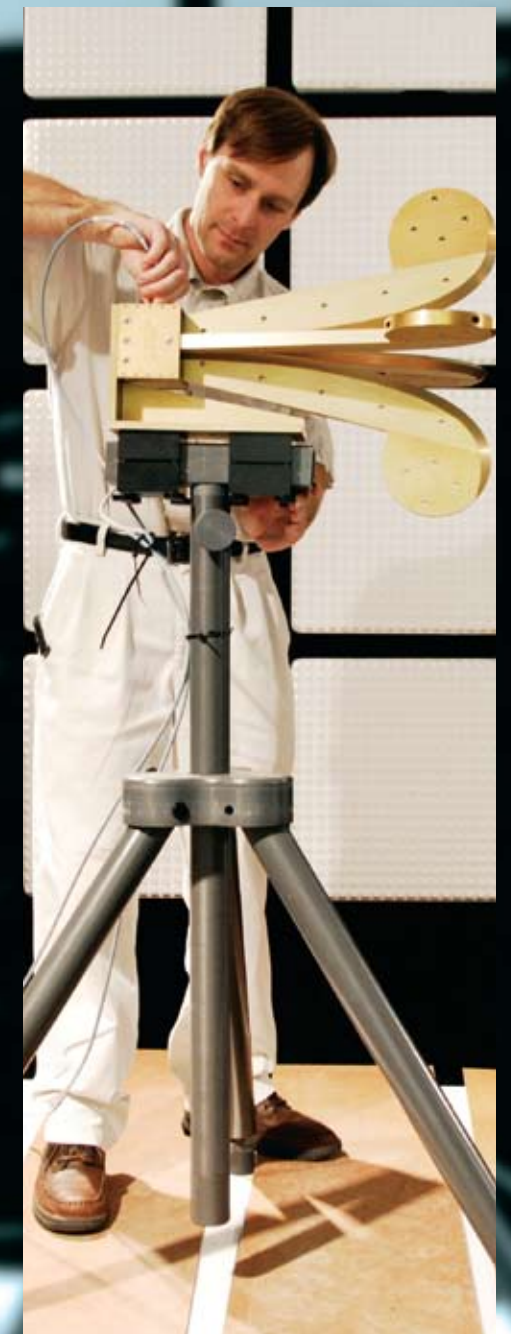
“CNSE already had capabilities in electronics design and miniaturization, but not the in-house capability to verify whether our designs matched simulations,” said Mike Reich, CNSE research engineering and RWSL manager. “The effect of the surrounding environment was always an unknown factor that we couldn't measure or correct for. Now we can perform tests that our clients and partners can rely on.”

Intelligent InSites and Pedigree Technologies are great examples of Incubator clients who can benefit from the testing chamber, Reich said. Intelligent InSites products use RFID technologies to track equipment in the health-care industry. Pedigree develops wireless devices that track inventories, monitor and manage machines and much more. Alien Technologies, an RTP tenant, is already using the chamber for testing RFID tags.

Reich says relatively few universities or research parks have similar anechoic chambers. That fact is making the RWSL a model for other academic and government testing facilities.

For example, researchers and administrators at Pacific Northwest National Laboratory, a U.S. Department of Energy research facility in Richland, Wash., are partnering with Reich and his CNSE colleagues to guide them through the process of establishing a larger version of the RWSL.

“It's rather unusual for a place like Fargo, or an institution like NDSU, to have a facility like this,” Reich said. “Previous installations by the same vendor are at places like Drexel University in Philadelphia, so we're in good company.”



New Building, Leadership Jump Start Technology Incubator



The Technology Incubator has been assisting companies for nearly all of the RTP's 10-year existence, but in many ways, 2008 was the first year of full-speed-ahead operation.

It was the first full year of existence for the new Incubator facility, which opened in March 2007. And the addition of Brenda Wyland as Incubator manager in January 2008 provided a real boost for its programming. Wyland brought years of experience in economic development, strategic planning, project planning and business assistance to the task of overseeing a facility with seven client companies, approximately 96 employees and nearly \$6 million in annual payroll.

Wyland is responsible for serving Incubator clients, acting as a field agent for the F-M RAIN Fund and, overall, evangelizing the mission of entrepreneurship across the community, region and state. She went right to work, developing programs and offerings on three fronts: client coaching, mentoring and education, student engagement and outreach.

Wyland is responsible for serving Incubator clients, acting as a field agent for the F-M RAIN Fund and, overall, evangelizing the mission of entrepreneurship across the community, region and state. She went right to work, developing programs and offerings on three fronts: client coaching, mentoring and education, student engagement and outreach.

"It's an honor to be leading such an important endeavor," said Wyland. "We are very fortunate to have the tenant base that we do and to have clients that are growing significantly. Now we need to focus on doing more of what has made that possible."

CLIENT SERVICES: Providing What They Need to Succeed

Entrepreneurial Board

"One of the best ways to build on the RTP's successes is to make sure companies have access to guidance and counsel from seasoned entrepreneurs," says Incubator Manager Brenda Wyland.

Wyland is developing a team of seven to nine successful entrepreneurs and professionals from a variety of disciplines to constitute a Coaching and Mentoring Board. The board will meet with every Incubator client at least once each quarter to discuss the company's direction, progress and challenges.

"These companies will be getting quality, high-level advice," she said. "It's the kind of expertise that start-up entrepreneurs generally can't afford, and it's from people they don't know or have access to. It's one of the best practices in the industry, and I think it's critical to delivering a successful program."

CEO Roundtables

Over the next year, client companies will be able to participate in four "CEO Roundtable" discussions. They will feature high-level CEOs and very successful serial entrepreneurs who are willing to share their experiences.

"It's invaluable for these kinds of people to say, 'Hey I've been there, I know what you're going through, and here's how I dealt with it,' or to share what they learned from particular challenges," said Wyland.

NoDemo

The Technology Incubator was one of three sponsors of the first North Dakota Demonstration (NoDemo) at the Fargo Theatre on November 6. The technology showcase was organized to raise awareness regarding some of the technical advancements and achievements made in the Fargo-Moorhead area.

Bonnie Lund from Xcel Energy opened NoDemo, and RTP Executive Director Tony Grindberg delivered a keynote address on technology-based economic development. They were followed by 25-minute presentations from five companies, including three Incubator clients - Appareo Systems, Avenue Right and Pedigree Technologies. FM-based tech companies Aldevron and Space Age Synthetics also made presentations.

The event was free and open to the public. Although it was technology focused, presentations were accessible to a non-technical audience, including the general public, K-12 students and teachers, undergraduate and graduate college students, academics and professionals.

"Our goal was to get everyone in the community excited about the amazing technical strides made by some of the community's smaller, lesser known companies," said Wyland, event co-chair. "It was a great success."

"OUR GOAL IS TRULY TO PROVIDE VALUE FOR THE ENTREPRENEURS THAT ARE HERE AND TO ASSIST THEM AS THEY START THEIR BUSINESS SO THAT THEY HAVE A MUCH BETTER CHANCE OF SURVIVAL WHEN THEY GRADUATE OUT."

- INCUBATOR MANAGER BRENDA WYLAND

David Batcheller of Appareo Systems was a NoDemo co-chair. In addition to the Incubator, primary sponsors were the Chamber of Commerce of Fargo Moorhead and Xcel Energy.



Leadership

Student Engagement: Building an Entrepreneurial Future

Entrepreneurial Scholarships

A makeover of an existing scholarship is giving students money and a leg up while providing much-needed helping hands for Incubator clients.

An anonymous donor started the Entrepreneurial Scholarship four years ago, but the requirements were, in the opinion of Incubator Manager Brenda Wyland, less than stringent. She revamped the program to make it more competitive and valuable to both students and Incubator clients. Selected students are guaranteed a scholarship of \$2,000 per year for four years, as long as they meet the program's requirements.

Scholarship applicants need a high school grade point average of 3.5 or higher and an ACT score of at least 23. They also are required to submit an essay explaining why they're interested in entrepreneurship and how this experience would position them to conduct their own entrepreneurial venture in the future. At NDSU, they must remain at a 2.5 GPA and volunteer for an Incubator client for at least 20 hours per semester.

In addition to the 20 hours of volunteer time they put in, the Incubator pays them \$10 an hour for an additional 20 hours per semester. The North Dakota Experimental Program to Stimulate Competitive Research (EPSCoR - www.ndepscor.nodak.edu) provides the additional funds. Whenever possible, students are assigned to the same Incubator company for their entire undergraduate careers.

The program can accommodate up to 20 students at a time, five in each year of study. At any given time, each of the seven Incubator companies has two or three students. "This is truly a value-added service for our clients, too," said Wyland. "They're getting 40 hours of work per student, per semester, which could be up to 160 free hours per year."

As for the students, they're getting entrepreneurial "super training" that also provides a bridge to the new North Dakota-based businesses of tomorrow.

"They are forming relationships that provide a strong incentive to stay engaged and start their own companies here later," said Wyland. "That's

"THIS IS AN INCREDIBLE OPPORTUNITY FOR STUDENTS TO BE EXPOSED TO THIS ENVIRONMENT, TO WORK WITH FAST-PACED, HIGH-GROWTH, START-UP COMPANIES AND TO GET A REAL-WORLD LOOK AT WHAT IT'S LIKE TO BE AN ENTREPRENEUR. ON THE FLIP SIDE ARE OUR CLIENTS. WORKFORCE DEVELOPMENT IS AN ONGOING NEED, AND THIS PROGRAM WILL PROVIDE AN OPPORTUNITY TO ASSIST WITH ADDRESSING THIS CHALLENGE"

— INCUBATOR MANAGER BRENDA WYLAND

a big part of what makes this program a logical extension for the Technology Incubator."

The Plus Experience

To maintain a competitive edge in today's market, businesses need employees who possess technical and business skills that enable them to adapt to industries' changing needs. Through an innovative training offering called The Plus Experience, the RTP is helping meet the challenge.

The Plus Experience, a supplemental business and technology offering of

the Technology Incubator, is now in its second year. A program of the North Dakota Experimental Program to Stimulate Competitive Research, the business and technology course enriches the lives and career potential of students and graduates. For businesses, it helps provide team members who can produce industry-specific results quickly.

Research indicates that start-ups and small companies, those with the fewest assets available for new employee training, benefit greatly from hiring The Plus Experience graduates. The program is available to growing biotech, engineering and software industries in North Dakota.

"The Plus Experience provides students an important 'jumpstart' into the real world," said RTP Talent Specialist Sharon Miller. "Program graduates possess a heightened sense of self-awareness, communicate better with co-workers and are equipped to provide value faster in the workplace, all of which make for a 'win' for employers."



The eight-week, two-credit course addresses three areas: business soft skills, product lifecycle management and world-class customer service. The curriculum is designed and taught by independent consultants who have vast knowledge in their areas of expertise. Miller targets seniors and graduate students, selects participants and limits class size to eight to 12 students. Twenty-four students participated in the program's inaugural year. Some of the eight students enrolled in the fall of 2008 graduated in December. The remainder are scheduled to do so in May 2009.

"Apart from being a major asset on my resume, the class challenged me to participate in numerous activities that helped clear all my concerns regarding the transition from academic career to a professional career," said Ikania Kaale, a Plus participant in the spring of 2007 and now a programmer at Multiband, Fargo, N.D.

Miller spearheaded the program with the vision, direction and support of NDSU Vice President Philip Boudjouk and Gary Smith, dean of the NDSU College of Engineering and Architecture.

Engagement

Microsoft Office SharePoint Server (MOSS)

In December 2008, the RTP launched an innovative training program with Valley City State University (VCSU) and Development Horizon LLC that includes state-of-the-art instruction and deployment of the Virtual Incubator application developed on the Microsoft Office SharePoint Server (MOSS) platform. MOSS provides a single, integrated location where people communicate more effectively, where they can store and locate information, manage workflows and do just about anything else that enables distance collaboration and enhances productivity.

Students enrolled in The Plus Program (see story on page 12) will have the opportunity to simultaneously learn MOSS and develop the Virtual Incubator for rural outreach. It is expected to launch in late 2008 or early 2009. The program will be taken a step further to offer classes for NDSU and VCSU students on the advanced side of Microsoft SharePoint.

Virtual Incubator

Unless a new company is physically located in the Technology Incubator, it's difficult to benefit from the programs and services that enable an entrepreneur to build an idea into a successful, profitable business.

Through the Virtual Incubator, entrepreneurs across North Dakota will be able to participate in the Incubator's programs and services. A targeted assessment tool will provide them access to additional resources, coaching/mentoring programs and a virtual entrepreneurial community.

"They'll do everything that our clients do now, but they'll do it in a virtual environment," says Incubator Manager Brenda Wyland. "They'll set goals and benchmarks, receive business assistance, interact with other Incubator clients through message boards and access recorded educational events."

A \$99,000 grant from the U.S. Department of Agriculture, Rural Development and match funds from VCSU made the MOSS and Virtual Incubator projects possible.

"I was recently meeting with people from Slovakia, and they asked if we could take these services one step further and provide them globally," said Wyland. "As long as it would provide benefit to North Dakotans, I'm sure we could expand the program. However, right now our efforts are focused in North Dakota."

Traditional Outreach

The Technology Incubator has partnered with the North Dakota State College of Science and the Center for Business Development, both of Wahpeton, N.D., to develop a needs assessment. The assessment is a first step in determining the foundation for a Center of Excellence grant application focused in advanced manufacturing.

"The partnership between North Dakota State College of Science and the NDSU Research & Technology Park is a perfect example of two entities working together to advance the economic conditions of this region," said NDSCS President John Richman.

The vision for the partnership is to foster the creation and enhancement of technology-based entrepreneurial activities and develop a culture of entrepreneurship and economic development in the Wahpeton area.



"ONE OF OUR GOALS IS TO PROVIDE OUTREACH TO RURAL COMMUNITIES AND ENTREPRENEURS. CERTAINLY WE WANT TO DO THAT PHYSICALLY, BY PRESENTING SEMINARS IN RURAL COMMUNITIES, FOR EXAMPLE. BUT WE ALSO WANT TO DO IT VIRTUALLY. RIGHT NOW, WE'RE CREATING THE INFRASTRUCTURE THAT WILL ALLOW AN ENTREPRENEUR LOCATED OUTSIDE OF FARGO TO FULLY ENGAGE WITH THE TECHNOLOGY INCUBATOR."

- INCUBATOR MANAGER BRENDA WYLAND

Infrastructure

2007-08 Financials

The NDSU Research & Technology Park ended the 2007-08 fiscal year with an emphasis on strengthening our future. Total rental and grant income, less total expenses, resulted in a net increase in assets of \$851,850. We dedicated funds from grants and rents totaling \$2,310,106 to construction and operation of the Technology Incubator. Total assets for the fiscal year equaled \$34,283,059. The majority of the assets include three buildings owned by the RTP: Research-1, located at 1735 NDSU Research Park Drive, Research-2, 1805 NDSU Research Park Drive and the Technology Incubator located at 1854 NDSU Research Circle North.

RTP BOARD

Dr. Joseph Chapman, President
President
North Dakota State University

Barry Martin, Vice President
Division President
US Bank

Chuck Hoge, Secretary/Treasurer
Vice President
Otter Tail Corporation

Mike Chambers, Assistant Secretary
President & CEO
Aldevron, LLC

Barry Batcheller
President & CEO
Appareo Systems

Dr. Philip Boudjouk
Vice President for Research, Creative
Activities and Technology Transfer,
North Dakota State University
Co-Chair, North Dakota Experimental
Program to Stimulate Competitive Research

Larry Ellingson
Retired Executive
Eli Lilly & Company

Dr. Craig Schnell
Provost and Vice President
for Academic Affairs
North Dakota State University

Paul Steffes
Chief Executive Officer
Steffes Corporation

Bradley Swenson
Executive Vice President
Chief Administrative Officer
Ulteig Engineers

RTP STAFF

Tony Grindberg
Executive Director

Sharon Miller
Talent Specialist

Michael Olson
Business Operations Assistant

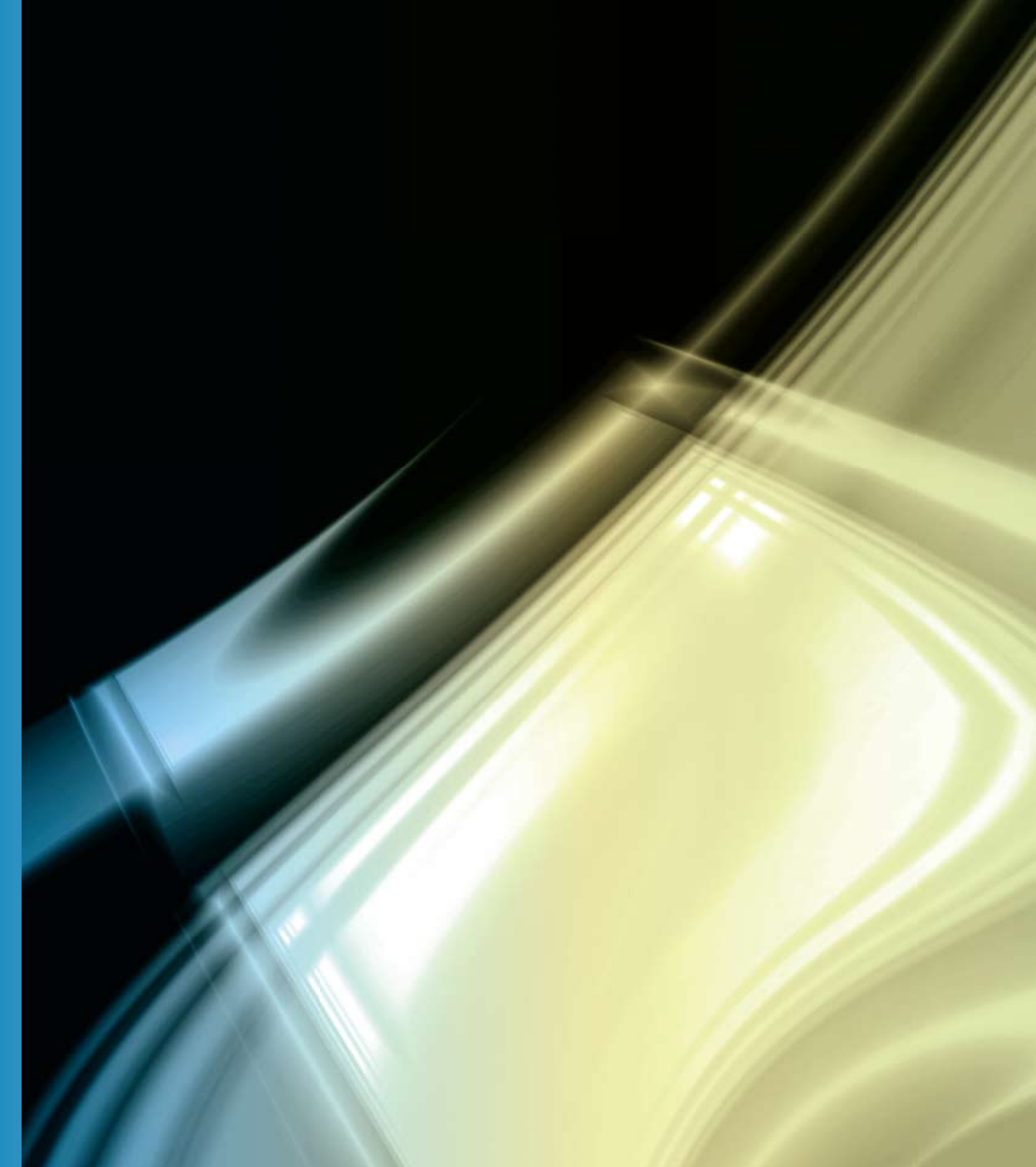
Jan Sobolik
Executive Assistant

Brenda Wyland
Incubator Manager

Kelly Correll
Business Development Assistant/RAIN Fund
Investment Analyst

Hannah Kusler
Business Operations Assistant





1999 2000 2001 2002 2003 2004 2005 2006 2007 **2008** 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

NDSU
researchTECHNOLOGY PARK INC.

1854 NDSU Research Circle North • Fargo, ND 58102
701-499-3600 (phone) • 701-499-3610 (fax) • www.ndsuresearchpark.com