

NDSU RESEARCH + TECHNOLOGY PARK  
**2009 ANNUAL REPORT**

# THE EDGE

The background of the cover is a dark green field filled with a complex, abstract pattern of overlapping, semi-transparent squares and rectangles. These shapes are arranged in a way that creates a sense of depth and perspective, with some squares appearing to recede into the distance. The overall effect is a digital, grid-like structure that is both intricate and rhythmic.

## NDSU RESEARCH & TECHNOLOGY PARK

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 North Dakota State University 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 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 citizens' 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.

## THE POWER OF PLACE

The NDSU Research & Technology Park (RTP) provides academic researchers and private-sector partners a place to combine talents to develop new technologies, methods and systems.

It's a simple statement, but one that is packed with potential. Since its inception, the Park has gone to great lengths to develop it to its fullest.

Today, the RTP positions North Dakota State University as a leader in the state, with technology-based economic development strategies that provide real-world educational experiences for students and high-technology career opportunities for graduates.

The RTP's short history is told through multiple success stories. Over its first 10 years, it has contributed to the quality of education at NDSU, diversified the economy of the state and built an environment for discovery. New businesses have been established, developed and are thriving; great career opportunities have been created for talented, intelligent people; and new families are flourishing in North Dakota.

Businesses in the RTP and those that have recently graduated from our Technology Incubator are worldwide innovation leaders. They include:

- A company that develops innovative flight data recorders and award-winning 3-D software for flight analysis and training programs. The advanced technology business designs, manufactures and supports electronic, mechanical and software products for aerospace, defense and transportation applications worldwide.
- A software company that helps change the way media advertising is bought and sold.

■ A software and services firm that is capitalizing on breakthroughs in wireless devices, sensor networks, Radio Frequency Identification and positioning technologies to advance tracking and automation of business assets.

■ A software firm that grew 500 percent in closed sales revenue and 400 percent in its customer base during its time in the Technology Incubator, from October 2007 through February 2009. The company did it with a product that helps health care be more efficient with an all-in-one system that serves as a wireless nurse call, provides security and access control, prevents patients from wandering, offers a wireless alert for staff or patients in duress, creates work orders for malfunctioning equipment and manages assets and inventory.

The hard work of our staff, our tenants and Technology Incubator clients is being noticed. In 2006, the RTP received a national award from the U.S. Department of Commerce for "Best" in the nation for Technology-Based Economic Development.

We continue to push for greater success for the people of our state, the region, the nation and the world. The United States must reinvigorate its research and development efforts, and we are uniquely positioned not only to contribute, but to help lead the way.

The RTP is a member of the Association of University Research Parks (AURP), a professional association that promotes and supports university research and science parks worldwide. AURP is in the midst of a campaign called "The Power of Place," a national strategy for building America's communities of innovation. At the association's spring meeting, former NDSU President Joseph A. Chapman was an invited keynote speaker, and a

## EXECUTIVE DIRECTOR'S MESSAGE

U.S. Department of Commerce official cited the RTP as a prime example of technology-based economic development.

AURP estimates that 300,000 people in North America work in university research parks and that every core job in a research park generates an average of 2.57 jobs in the economy. The RTP employs more than 550 people with an average salary of \$51,000.

As we move forward, we are focusing on five AURP policy recommendations:

- Establish American innovation zones to modernize the U.S. approach to fostering competitive research and development.
- Enact a Federal Innovation Zone Partnership Program to focus on areas of high national needs, such as energy research, homeland security, food safety and global climate change.
- Build sustainable communities of innovation to encourage researchers and entrepreneurs to live where they work.
- Solidify tax benefits for research and development to create an even playing field with our global competitors.
- Import innovation to recruit foreign technology companies.

America needs to focus on research and development to maintain its leadership in science and innovation. New ventures face tremendous odds, and risk is a necessary part of the equation. However, research indicates that firms that graduate from research park incubators are more likely to succeed and, overall, research parks provide support in terms of research and human capital that help minimize the risks.



Tony Grindberg

The NDSU Research & Technology Park is proud to be leading the way. Clearly, this is a powerful place, one with the talent and drive necessary for discovering tomorrow's breakthrough technologies.

Thank you for your continuing support and partnership.

Sincerely,

Tony S. Grindberg  
Executive Director  
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 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



**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 has 53 full-time employees and several student interns.

**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 conducts research and development in the 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)** conducts multi-disciplinary research with partners in the governmental, private and university sectors. CNSE's scientific capabilities include bioactive materials, combinatorial science, corrosion protection, electronics miniaturization, flexible electronics and materials, hard coatings, wireless sensors and radio frequency identification (RFID). (see story page 5)

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 and supports research and creative activities across campus. It assists faculty in seeking and submitting proposals for research funding and protecting intellectual property 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 & Engineering. The lab provides testing capabilities and support for research and development partnerships between NDSU, industry and government in RFID technology areas.

**Phoenix International**, a John Deere® company, designs and manufactures highly rugged, customized and integrated electronic components and systems.

## TECHNOLOGY INCUBATOR CLIENTS

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

**Bolder Thinking** is developing advanced call center technology that leverages the current state-of-the-art in cloud computing to create a 'hosted' call center telephony infrastructure.

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 gain 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.

**FormulaNow LLC** has designed an on-demand infant formula dispensing system which provides a safe, efficient and consistent method of preparing a bottle of infant formula with the push of a button. (see story page 10)

**Genosys LLC** was incorporated in May 2009 by a group of investors with vested interests in the global seed industry, particularly in the areas of hybrid sunflower seed breeding, production and distribution. With its first round of capitalization, the company was able to acquire a 15-year-old sunflower breeding program. Genosys' business objective is to capture the explosive growth momentum and market potential of developing markets such as China, Ukraine and Uzbekistan. Genosys aims to provide well-developed products that cater to country-specific farming practices and consumption behaviors. Genosys' social objective is to elevate the living standards of the people in developing countries' agrarian communities through shared knowledge and education that help increase crop yield and profitability.



**Intelligent InSites, Inc.** is a leading provider of enterprise visibility solutions for the healthcare 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.

**Larada Sciences** is a science-based medical technology company dedicated to the elimination of human head lice infestations. Headquartered in Salt Lake City, the company develops and commercializes proprietary head lice treatment technologies, including new medical devices and related services, that eradicate head lice without the use of chemicals or pesticides. (see story page 9)

**My S Dot Touch** is developing the "My S Dot Touch" netbook. The hybrid book-like laptop is an all-in-one technology device with dual touch screens that allow it to serve as an e-reader, laptop computer, cell phone, MP3 player, photo album and much more.



**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.

## CNSE: TECHNOLOGY, PEOPLE AND INNOVATION

North Dakota State University's Center for Nanoscale Science & Engineering (CNSE) conducts large-scale, multidisciplinary research for government and industry. CNSE scientists combine their talents to discover, innovate and achieve technology breakthroughs in a variety of areas.

CNSE is in the RTP along with the Center for Advanced Electronics Design and Manufacturing, the Center for Integrated Electronic Systems, the Center for Surface Protection for Hard Coatings, the Center for Nanoscale Energy-Related Materials and the NDSU Product Design Center. CNSE employs more than 120 people including full time staff, part-time students and faculty researchers.



coatings being tested that could be used on military and commercial ships, wireless sensor research that contributed to product development for a major corporation, and an agro-security project that uses RFID to track cattle. CNSE's research has been recognized in various publications including *Wired* magazine and *The Financial Times*.

CNSE continues to build upon its national and international reputation for research in microelectronics, coatings, nanotechnology, robotics and other areas. In mid-2009, Dr. Larry Pederson was named as director to lead CNSE into its next phase of development.

Pederson most recently held the position of laboratory fellow in the Energy and Environment Directorate at Pacific Northwest National Laboratory (PNNL) in Richland, Wash. He managed the High Temperature Electrochemistry Center/Solid State Energy Conversion Alliance Coal-Based Systems Core Research program. He has published approximately 140 journal articles and conference papers, holds five U.S. patents and has three patents pending. He also holds 16 foreign patents.

"I find the technical breadth and quality of research and development activities being conducted at CNSE to be truly impressive," said Pederson. "I look forward to working with the talented staff and faculty to identify technical thrusts, procure funding, establish strategic partnerships and build upon the opportunity to attract outstanding researchers and students while expanding research facilities and capabilities."

Pederson's PNNL research team received an R&D 100 and Federal Laboratory Consortium Technology Transfer Award for developing a unique technology for producing ultrafine ceramic powders that improve manufacturing of solid oxide fuel cells and many other important products. The R&D 100 award from R&D Magazine honors inventors by identifying the 100 most technologically significant products and advancements for each year and recognizing winning innovators and their organizations.

"As CNSE continues to grow, Dr. Pederson's leadership will assist us in developing innovative technologies while building partnerships and opportunities for researchers, faculty and students," said Dr. Philip Boudjouk, NDSU's vice president for research, creative activities and technology transfer.

For more information, go to [www.ndsu.edu/cnse](http://www.ndsu.edu/cnse).



Dr. Larry Pederson

## NDSU Defines Materials and Nanotechnology Research

NDSU has established a new type of research environment for students. The new Materials and Nanotechnology graduate program offers students a unique opportunity to participate in nontraditional interdisciplinary research in a shared facility.

Dr. Daniel Kroll, professor and head of the NDSU Physics Department, says the facility will allow students to participate in experiments, which was not previously possible. "The lab space is essential," he said. "Students can become introduced to a subject through experimentation. They get to work with materials before they truly understand what is going on, and then they get excited about the field."

Materials science and nanotechnology research is at the cutting edge of science and technology. Graduate students with a technical background are vigorously recruited by prospective employers. The demand in this area is due to growth in the field. One of the best known estimates, published by the National Science Foundation, estimates that a world market for nanotechnological products will make up \$1 trillion in 2015.

As the first and only program of its kind in North Dakota, the graduate program in materials and nanotechnology

is an essential response to the needs of the state, region and nation.

NDSU recently added an established researcher and two junior experimentalists who will enhance the strengths of current faculty. Faculty members from the College of Science and Mathematics and the College of Engineering and Architecture in multiple disciplines, including chemistry, civil engineering, coatings and polymeric materials, mechanical engineering and physics, will contribute to the interdisciplinary program.

The program will be ideal for graduate student researchers because materials and nanotechnology research incorporates multiple disciplines. Current research includes polymers, super hard coatings, new materials for electronics, nanomaterials, nanofabrication, bio-nano systems, computational materials science and engineering, and nanomedicine. Applications include protecting metals from corrosion using coatings and other research into medical issues such as artificial tissue and medicine delivery.

The Center for Materials and Nanoscience's location, in half of the new 40,000-square-foot Appareo Systems facility in the RTP, will be ideal for research collaboration. Typically, the materials and nanotechnology discipline is made up of groups of researchers from different departments with no common space.

Materials and nanotechnology researchers also plan to collaborate with the NDSU Center for Nanoscale Science & Engineering, which conducts large-scale, multi-disciplinary research for government and private sectors.

The Center for Nanoscale Science and Engineering conducts multidisciplinary research. CNSE's scientific capabilities include electronics miniaturization, flexible electronics and materials, wireless sensors and radio frequency identification (RFID), hard coatings, bioactive materials, combinatorial science and corrosion protection.

Also known as Research 2, CNSE includes 77,000 square feet of clean room, laboratory and engineering spaces and an RFID and wireless sensor lab within the RTP. CNSE scientists focus on a variety of research areas, including:

- Bioactive Materials
- Combinatorial Science
- Corrosion Protection
- Electronics Miniaturization
- Flexible Electronics & Materials
- Hard Coatings
- Wireless Sensors & Radio Frequency Identification (RFID)

CNSE's scientific achievements include work on microsensors used by the U.S. military on several continents, fouling-release



## TECHNOLOGY INCUBATOR EXPANDS NDSU'S ROLE

The Technology Incubator is expanding NDSU's role in the development and commercial application of technology and helping lead the way to greater diversification and growth in the local, regional and global economies. Since it opened in March 2007, the Incubator has been promoting the development of new technology-based companies by providing access to financing, technical and business assistance, market research, management consulting and shared services in a state-of-the-art facility.

"The overall goal of the Technology Incubator is to provide a wide range of programs and services that foster the formation of high-growth technology ventures, accelerate their time to market and ultimately increase their

chance for long-term success," said Brenda Wyland, RTP Technology Incubator manager.

From local and regional perspectives, the Incubator serves as a catalyst for economic development by growing technology-based companies. Over this past year alone, the Incubator celebrated the graduations of three client companies: Appareo Systems, Intelligent InSites and Pedigree Technologies. Meanwhile, it also brought several new start-up companies into the program.

"The impact the Technology Incubator has on the local economy is impressive, with 121 employees and a total annual payroll of more than \$8 million," said Wyland.

***"The Technology Incubator has made it possible for Bobcat Company to be involved in the student scholarship program. This program allows us to work with top university talent from multiple disciplines. The students gain insight to office and laboratory working environments and witness the complete product development life cycle."***

- Scott Rossow, Engineering Manager, Global Electronics Systems, Bobcat Company

Incubators improve the success rate of early-stage technology ventures by reducing start-up risks through an established process of support. Having access to a high level of expertise from successful entrepreneurs and a variety of professional disciplines is critical to an entrepreneur's success.

"We have established an incredible group of serial entrepreneurs and business executives who have graciously agreed to serve on our entrepreneurial coaching team and share their time and talent with our entrepreneurs," Wyland said. "They

"Our state-of-the-art facility helps our entrepreneurs project a professional image, but if someone is seeking office space, the Incubator is not for them," Wyland said. "We're here to provide value-added services and access to the technical assistance they need so they can focus on growing their businesses, building their teams, getting to market and doing all of the things they need to do to become profitable and successful."

are very successful in their respective industries and lend significant guidance to the start-up companies in the Incubator."

Wyland notes that increasing student involvement in entrepreneurial activities is also important. The Incubator has expanded its entrepreneurial scholarship program to engage scholarship recipients with clients located in the facility. "We provide students opportunities to work for fast-paced, high-growth start-up companies, and our clients benefit from access to student talent and future employees," she said.

Wyland also has implemented an industry best practice, a corporate sponsorship program. "Building a strong business requires access to quality service providers such as legal and accounting services. This program provides our entrepreneurs access to comprehensive resources that are critical for starting and growing their businesses," she said.

### TECHNOLOGY INCUBATOR ECONOMIC DATA

	As of June 30, 2008	As of June 30, 2009
Tenants	8	7
Employees	96	121
Student Employees	14	12
NDSU Graduates	32	48
Total Monthly Salaries	\$489,233	\$732,080
Annualized Salaries	\$5,870,802	\$8,784,960

***"The student scholarship program will give me real world experience only 10 minutes from campus where I can study and implement what I study at the same time. I am excited for the opportunity to work with experts in the field that I am pursuing."***

- Blaine Hartkopf, junior mechanical engineering major from Howard Lake, Minn.

#### ENTREPRENEURIAL COACHING TEAM

- Barry Batcheller** Appareo Systems
- Chris Byron** Prairie Consulting Group
- Neil Doty** N.C. Doty & Associates
- Dan Fisher** The Copper River Group
- Rick Kasper** Global Electric Motorcars
- Chuck Needham** Phoenix International

## Incubator Company Gets AHEAD of an Itchy Problem



A company in the Technology Incubator has developed a solution to an itchy problem that's spreading across the United States and around the world: head lice.

Each year, 6-12 million Americans are infested with head lice, and American children miss 12-24 million school days as a result. Unfortunately, most popular treatments, such as chemical shampoos, louse combs and home remedies, are largely ineffective. And, like many crop insects, head lice are parasites that are rapidly evolving chemical resistance to many of the traditional pesticide-based treatments.

The LouseBuster™ device, the first patent-pending product developed by Larada Sciences, is a breakthrough medical device that provides a safe, fast and highly effective way to eradicate all generations of head lice without using chemicals. The LouseBuster device kills lice and their eggs in a single 30-minute treatment by delivering a large amount of controlled, warm air to a person's scalp and to the base of hair shafts where lice and their eggs are most frequently located. The new technology is safe, extremely effective, affordable and fast, according to Larada Sciences CEO Larry Rigby. And, since no chemicals are involved, it is safe even for individuals who have asthma, allergies or other conditions that preclude traditional chemical treatments.

The Food and Drug Administration has reviewed and cleared the LouseBuster for marketing, and Larada's scientific data has been published in the peer-reviewed journal *Pediatrics*.

"This new treatment can minimize or even eliminate school and workplace absenteeism due to head lice infestations," said Rigby. "Further, it is very unlikely that lice will evolve resistance to the treatment, so health practitioners have a new primary treatment that is highly effective for all infestations."

Dr. Dale Clayton from the University of Utah is the company's lead scientist and technology inventor. He founded Larada Sciences with several seasoned entrepreneurs with numerous successful technology and medical device start-up companies to their credit.

Rigby said North Dakota's can-do attitude, the state's firm commitment to economic development, the availability of great talent, access to NDSU facilities and students, the proximity of a top-notch manufactur-



The Lousebuster Machine

ing partner and a solid base of early stage investment capital and development programs all contributed to the decision to locate Larada Sciences in the Technology Incubator.

"The Technology Incubator is a very good fit for our North Dakota operations, not just in terms of office space and shared services, but also for the programs and services it offers," he said. "Being surrounded by other technology innovators in the Red River Valley is also an invaluable benefit."

Larada Sciences will begin manufacturing the LouseBuster devices at ComDel Innovations in Wahpeton in January 2010. They are being sold primarily to health care professionals for use in schools, clinics and other places where lice are commonly diagnosed or treated. The treatment also will be available through a network of company-run service providers and through certified lice treatment providers around the world who will provide the treatment and other head lice services.

For more information, go to [www.laradasciences.com](http://www.laradasciences.com).

## Incubator Start-Up Eases Nights for Parents, Infants

Three o'clock in the morning, with an impatient infant crying in the background, is no time to be fumbling with the bottle. FormulaNow, a start-up venture in the Technology Incubator, has the formula for making late-night feedings easier on bleary-eyed parents and their hungry babies.

FormulaNow, a 2009 InnovateND Idea Champion winner, is an on-demand infant formula dispensing system created by Aaron Lamb, Nikki Lamb and Douglas Snider. The system alleviates steps such as boiling water, measuring powdered formula and making sure the formula is the correct temperature. It allows parents or childcare providers to prepare perfectly reconstituted infant formula at the ideal temperature in just a few seconds with the push of a button.



Nikki Lamb, President, FormulaNow

"FormulaNow allows caregivers to create a safe, sanitary and consistent bottle of formula every time, whether at home or at daycare," said Nikki Lamb, the company's president.

The system resulted from the Lambs' vision for an easier way to get a bottle of infant formula ready. Parents of five children, Aaron has corporate experience with on-demand beverage systems, and Nikki's background is in sales and marketing. They combined their talents with Snider, an architect and designer in Chicago who is responsible for the design and aesthetics of the FormulaNow dispensing system. All three are North Dakota State University alumni.

"The Technology Incubator has provided FormulaNow invaluable resources such as coaches and mentors, corporate sponsors, a network of support and in-kind services that have reduced our initial financial burden," said Nikki Lamb. "Residing in this state-of-the-art facility adjacent to NDSU also gives us access to the resources we need to further our research and grow our business."



# THE TALENT PORTFOLIO



In today's highly competitive and global marketplace, it's not enough to help entrepreneurial companies get started. To be viable, both in the short and long term, they need to attract and retain talented and innovative employees.

That's where Sharon Miller, RTP talent specialist, comes in with The Talent Portfolio. It consists of programs and initiatives that help companies initiate and manage human resource functions, recruit talent from outside the area and develop talent from within.

## THE PLUS EXPERIENCE

The Plus Experience is a class offered in conjunction with North Dakota Experimental Program to Stimulate Competitive Research (EPSCoR). It is a two-credit Distance and Continuing Education (DCE) program for students in preferred disciplines such as software development, engineering and biotechnology.

Thirteen students participated in the course in 2009. They were assessed for fundamental top performer traits, they received hands-on training in specific areas such as product life cycles, and they benefited from mentoring and coaching related to "soft skills" that address communication, teamwork, emotional intelligence and customer service.

"The program provided the students a glimpse into the real world of business as well as a foundation of strong communication, professionalism and accountability," said Miller. "To achieve long-term success in an ever-changing workforce, how students conduct themselves is as important as what they know."

### 2009 RECRUITING

- 63 new hires
- Combination of interns, entry level, mid-level and executive roles
- Average annual salary of \$50,000
- 12 hires at annual salaries of \$100,000+

## RECRUITING SERVICES

Miller also implements recruiting initiatives to assist the RTP's tenant companies with talent acquisition.

"Entrepreneurial companies typically don't need a full-time HR resource, yet it is critical to recruit high performers who are adaptable and committed," Miller said. "My role is to assist in the quest to attract and retain talented people who push the business goals forward."

In facilitating structured recruitment processes, she develops job descriptions, monitors candidate flow, interviews candidates, coordinates interview loops, facilitates recap meetings, checks references, communicates with candidates and provides offer recommendations.

## NEXT STEPS

The Technology Incubator has to move forward with the same spirit of the entrepreneurial companies it helps get started, with innovation and creativity in exploring new ideas and methods, Miller said. The following programs are in development:

### Open Mike

These initiatives provide innovative ways to attract talent to tenant companies. The program will be a targeted approach to clearly identified business segments, developed through partnerships with the North Dakota Department of Commerce, the Greater Fargo Moorhead Economic Development Corporation and Monster.com.

### Talent Workshops

The goals of these sessions will be to educate students and connect them with targeted employers through assessments and coaching opportunities that enhance and assist with career aspirations. Potential partners are the Center of Innovation at the University of North Dakota and EPSCoR.

### Green Jobs/Hot Skills

The program will be an opportunity to build awareness of alternative employment sectors and transferable skill sets that can directly impact communities, the region and the state.

## NEW EDUCATIONAL PROGRAM ENCOURAGES YOUTH ENTREPRENEURSHIP

The RTP, in partnership with Fargo and West Fargo public schools, has created a two-year pilot program to advance youth entrepreneurial education.

The program will expand the Distributive Education Clubs of America (DECA) program to:

- Include entrepreneurship opportunities for eighth and ninth graders.
- Create a youth mentorship network

with area business leaders.

- Develop an annual innovation competition to promote technology-based career opportunities.

- Create a virtual entrepreneurial challenge to help engage students as they learn about business and marketing strategies.

"Preparing our students to be players on the world stage will require that

they have school-based experiences which enable them to dream big and take risks," said Dr. Dana Diesel Wallace, superintendent of West Fargo Public Schools. "When we are able to develop such a cadre of youth, we will serve them, their local community and our world well."

The program resulted from a youth entrepreneurship feasibility study initiated by the RTP. The goals of the study were to determine if it is possible

to identify entrepreneurial characteristics in youth, to establish a task force that would recommend initiatives for developing youth entrepreneurial education in the three communities and to provide support for future entrepreneurial development in the region.

Paul Tefft joined the RTP in September 2008 to facilitate and manage the overall process. "Entrepreneurship is not just business, it is economics, politics, history and geography. It is the building block

of society," said Tefft. "Without strong entrepreneurial education, our society will not have the tools necessary to compete in the global economy."

RTP Executive Director Tony Grindberg said that, as a former West Fargo High School teacher, Tefft brings a unique perspective to the initiative. "He has a strong understanding of the education system, a network of educators, and a belief in the need to engage students with entrepreneurial education at a

much earlier stage in the process so they can compete in today's knowledge-based economy."

Aspects of the program were implemented in the fall of 2009 with corporate, school and entrepreneurial sources providing funding. The program may be expanded to include Moorhead at a later date.

## GRINDBERG ELECTED TO ASSOCIATION OF UNIVERSITY RESEARCH PARKS BOARD

RTP Executive Director Tony Grindberg has been elected to the Board of Directors of the Association of University Research Parks (AURP).

Grindberg has been the executive director of the RTP since 2002. His term on the AURP board runs through 2012, and he will be eligible for a second two-year term.

“We’re pleased that the NDSU Research & Technology Park has earned a seat at the table where the future of research park collaboration and technology innovation research is being shaped,” said Grindberg. “This is an excellent opportunity to strengthen our leadership position while raising the profiles of our park, North Dakota State University and our state overall.”

The AURP, a professional association of university related research and science parks, promotes the development and operation of research parks that foster innovation, commercialization and economic competitiveness in a global economy through collaboration among universities.

For more information, go to [www.aurp.net](http://www.aurp.net).

### RTP BOARD

#### Dr. Richard Hanson

*President*  
North Dakota State University

#### Barry Martin, Vice President

*Division President*  
US Bank

#### Chuck Hoge, Secretary/Treasurer

*Vice President*  
Otter Tail Corporation

#### Bradley Swenson, Assistant Secretary

*Chief Operating Officer*  
Ulteig Engineers

#### Mike Chambers

*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

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