What is the New Jersey Incubation Network (NJBIN) and what is its mission?
NJBIN is a collaborative of 12 business incubators in New Jersey that support the R&D and commercialization of primarily technology and life science start-up to early-stage and expansion in-state companies.

What is a main goal of NJBIN incubators?
NJBIN incubators share the goal of assisting entrepreneurs by attracting and nurturing new businesses in all of the state’s major growth industries.

Why is NJBIN important to New Jersey?
NJBIN and its companies create jobs, attract new companies and investors, promote international trade, expand technology development, facilitate access to university/higher education and business relationships, promote New Jersey as a business destination, and add to the short- and long-term fiscal health of the state from direct benefits such as business, income, and payroll tax revenues. Indirect benefits to communities are numerous!

How large is the NJBIN organization?
Collectively, the companies located at NJBIN incubators approximate the size of a Fortune 500 company, with 550 companies, 1,500 employees, $320 million in annual revenue, and $93 million in grants to incubator companies. Revenue generation capabilities make investing and funding incubators and member companies a worthwhile spending activity for both the public and private sectors.

How are the needs of NJBIN portfolio companies unique?
Technology and life science companies have a longer development cycle time and require considerably more funding than “Lifestyle” companies typically assisted by Small Business Development Centers (SBDC) and Small Business Administration (SBA) programs. In addition, SBA loans require collateral such as hard assets on the balance sheet, something technology and life science venture companies generally do not have. NJBIN helps these companies with grant applications, assistance in technology and business plan development, and completion of major milestones needed to attract in-state and out-of-state investors and business development partnerships.

Does NJBIN attract businesses to New Jersey?
Absolutely. NJBIN boasts the largest high technology incubator in the U.S and two incubators designated as “Soft Landings International Incubators” by NBIA for attracting offshore companies to New Jersey. In addition, NJBIN is a partner with NBIA, an organization with national and international affiliations. Support for business incubators and their member companies demonstrate that NJ is business-friendly.
An Irresistible Urge to Make Things Better

It bothers Robert Jensen when cost interferes with the adoption of economically and environmentally beneficial technology. And when something bothers him, Jensen’s creative juices start to flow.

“I’m an engineer, an entrepreneur, and a creative person when it comes to mechanisms and machinery and the functionality of things,” said Jensen. “I get much of my inspiration from my engineering background, my desire to make things better, more efficient.”

Jensen’s creativity, combined with his entrepreneurial spirit and advanced degrees in engineering, led him to found Agreenability, which is located at the New Jersey Meadowlands Commission Business Accelerator in Lyndhurst. Agreenability is an alternative energy business that is developing innovative components for Geothermal Heat Pumps.

Making use of existing geothermal technology, every homeowner in New Jersey could save up to 70 percent on energy bills, or around three to four thousand dollars every year. This technology uses an underground loop of pipes filled with refrigerant that are

(continued on page 6)
Incubator Spotlight: Rohrer College of Business Incubator

Although the Rohrer College of Business Incubator is the newest and the smallest in the New Jersey Business Incubator Network, this precocious incubator has already established a solid reputation and ambitious vision for the future. Within two years of opening in 2008, the incubator graduated a company that is now a leading social media ad network, and it is beginning to build its vision for establishing the incubator as a hub of medical entrepreneurship.

The key to the incubator’s ability to quickly produce an extremely successful graduate may be due in part to its affiliation with Rowan University and The Rohrer College of Business. The incubator has been able to tap into a cycle of innovation that starts with undergraduate students and will ultimately be manifest in a planned Tech Park, the first building of which houses the incubator.

Two of the companies that either are or have been located at the incubator were founded by Rowan alum, and another founder is a Rowan professor. The three other companies have no previous affiliation with Rowan University.

“We’re hoping to get even more student and faculty-based companies to come into (continued on page 7)

Investor Insight: Michael Doyle of Goldin Ventures

Early stage technology companies that have just completed the “birthing” and commercialization phase and are poised to enter the acceleration phase are at a very awkward stage. In all likelihood, they have had the financial support of angel investors up to this point, but their pending growth brings financial needs that are too great for angel investors and not large enough for venture capitalists. Michael Doyle, president of Goldin Ventures, sees that point in a business’s lifespan as his best window of investment opportunity.

Doyle’s preference for companies that are on the verge of business acceleration is based upon his 27 years of entrepreneurial experience. Most recently, Doyle worked as president of Eastern Research Inc., which grew from $3 million to nearly $62 million during his nine years of leading the company. When this company was sold to Sycamore Networks in 2006, the previous owners of Eastern Research Inc. asked Doyle to continue the successful partnership and Goldin Ventures was born.

Goldin Ventures is interested in technology companies in southern New Jersey, eastern Pennsylvania, and northern Delaware that are looking for $1 million to $3 million investments to fund their acceleration stage. Companies located in NJBIN’s technology-focused incubators are an attractive investment for Goldin Ventures, provided the product has reached commercial acceptance and there are some revenues for the business.

Doyle recently offered these insights for business owners seeking funding from his or other investment companies:

- **Investors rarely invest in cold deals.** An entrepreneur’s instinct is to reach out to investors directly, but it is much wiser to be engaged and introduced through bankers, accountants, lawyers, and friends that the investor already knows and trusts. When investors are approached by cold calling, they can become (continued on page 5)
When Dr. Cesar Bandera stepped into the Emergency Operations Center at the Center for Disease Control this past November, the place was buzzing with activity. CDC staff was tracking the cholera epidemic in Haiti, which was claiming up to 40 lives per day and was expected to soon claim 160 lives per day.

Shortly after his arrival, CDC officials asked Bandera to abandon the original intent of his visit, which was to run a pilot test of technology he had been contracted to develop that pushes instructional videos to cell phones. Instead, Bandera was drafted to use the technology on a larger, real life scale to help train clinicians in Haiti who were treating cholera victims. He had 15 minutes to switch gears and launch his product.

While the “real world” test of Bandera’s technology came about in a whirlwind, the impressive career of the inventor himself and the creation of Cell Podium, the company that sells the technology, took many years. Bandera originally developed the technology under the umbrella of BanDeMar Networks LLC, which he founded in 2004 and located at the Enterprise Development Center at the New Jersey Institute of Technology in 2005. BanDeMar Networks, in turn, taps into research and development that Bandera did while leading a research and development group at a defense company in Amherst, New York—which he helped to grow and was eventually sold to Northrop Grumman Corporation—and at AT&T Labs. In 2004, when AT&T closed its labs, Bandera formed BanDeMar Networks LLC, which develops technology for video processing, educational markets, distance learning, and exhibits at the science museums. While president of BanDeMar Networks, Bandera’s existing reputation as an expert proposal writer became legendary, and in 2005 he was an invited guest lecturer on the subject at the Enterprise Development Center. Soon after this he located his business at the incubator.

“BanDeMar Networks produces unconventional educational technologies: esoteric solutions that require intellectual property,” said Bandera. One example of a BanDeMar Networks product is the Global Microscope at the Liberty Science Center in Jersey City, New Jersey. The exhibit is a holographic projection of the earth as it would be seen from the International Space Station. Visitors can see different past and present aspects of the earth, such as pollution, droughts, and seasons. The Science Center and BanDeMar Networks recently received a $1 million grant from NASA to expand the exhibit.

The seed for Cell Podium was planted in 2007, when—even before the proliferation of Twitter—the U.S. Department of Health and Human Services awarded a research and development grant to BanDeMar Networks to see if it would be possible to provide just-in-time training videos to cell phones during emergencies. The technology was conceived as providing emergency responders with information in situations where there is no time or ability to search for the information on the web.

“They wanted to be able to push the information into cell phones regardless of whose phone it was, who the carrier was, the phone’s data plan, or the payment plan,” said Bandera. “This turns out to be a very difficult thing to do. Cell Podium’s system determines which format each individual cell phone can support, and that is what the system uses to communicate to that cell phone.”
By 2008, the cellular application was getting significant interest and had many applications, so Bandera formed Cell Podium LLC to handle all cell phone outreach and training. He did this in partnership with Schmitt and Associates, a software solution provider and expert in applications development located across the hall from BanDeMar Networks in the EDC incubator. “One of the key benefits of this incubator is the high density of companies,” said Bandera. “There are many opportunities for collaborations and for pursuing new markets, as we have done in the Cell Podium partnership with Schmitt and Associates.”

It is Cell Podium’s technology that the CDC is using to get critical health care information to clinicians in Haiti. Even though the CDC has instructions on its website on how to save a critically ill cholera patient, many rural doctors, health care workers, and health aides do not have access to this information, leading to many unnecessary deaths of chronically ill patients. The CDC asked Bandera to create a video based on their guidelines and push it to people in Haiti. “CDC has a small army of health care workers out in the field in Haiti, so we first started sending it to them. They in turn started sending it to all the clinicians, and it spread,” said Bandera. “Our video is going viral in Haiti.”

Michael Doyle of Goldin Ventures
(continued from page 3)

overwhelmed by the number of calls from companies that are not aligned to what the investor is interested in.

- Discuss the risks early to build trust. Sooner or later investors will understand the risks, but it’s smarter for the entrepreneur to deal with potential risk proactively. When entrepreneurs do this, the investor gains insight into the entrepreneur and into the business. When entrepreneurs describe the risks involved, they are scaling the boundary between themselves and the investor. Both are standing together and looking at the risks.

- Succinctly articulate what business you are in. This may seem obvious, but it’s surprising how often entrepreneurs do not do this. Don’t just talk about the technology: it’s an aspect of the whole, but it isn’t the business. Investors want to understand how the technology will translate to a marketable product and be your business.

- It’s never over until it’s over. At a certain point, the investor crosses an emotional threshold where they want to invest, but the deal isn’t closed yet. A significant number of transactions (20 percent) break down in the final stages. Closing a deal takes much longer than the entrepreneur wants or expects. Stay the course: you’re not finished until you have a signed document.

- Execution is important. An entrepreneur needs different skills to accelerate than to commercialize a technical idea. Investors like to see that the entrepreneurs have a strategic case for the business, that there is a clear commercial opportunity, that they comprehend the market, and that they are equipped to succeed. Ultimately it’s about execution, how the entrepreneur is going to make this happen. The credential of having done this before is beneficial.

- Investors don’t invest in technology, they invest in people. Investment decisions are all about integrity, trust and confidence, and people investing in people. Don’t get swept up in the technology segment of it. It’s the person that will get investors to cross the emotional threshold and want to invest.
An Irresistible Urge (continued from page 2)

installed around the building. As the refrigerant circulates, it picks up heat from the ground, which it then takes back to the heat pump, which uses electricity to extract the heat from the fluid. The cooler fluid is then sent back through the loop to repeat the cycle. For air-conditioning, the heat pump expands the refrigerant, which cools it, and then expels the cold air into the home.

“This is incredibly more efficient than other air-conditioning systems that use outside air of about 95 degrees, whereas the earth is about 55 degrees. When you could cool the air-conditioner with the earth instead of the air, you triple the efficiency of the system.”

However, despite its efficiency and cost-saving potential, geothermal technology is used in only about three percent of buildings across the country. There is a good reason for this: the cost to install the system is prohibitively expensive.

“Using conventional methods, the average home in New Jersey might require around six to 800 feet vertical loop of pipe to connect to one of these systems,” says Jensen. “I’m hoping to bring that down to three to 500 feet of pipe, which could be a significant savings of around 50 percent. Instead of $15,000, it might cost $7,000 or $8,000 to install.”

Savings plus the reduced cost of installation will make the payback time and overall cost very attractive to the consumer. By significantly reducing the cost of installation of the ground loop, Jensen hopes that he can accelerate the growth of the market and the popularity of the system, eventually leading to the mainstream adoption of this technology.

Jensen attributes a good portion of his success in developing this idea for market to the New Jersey Meadowlands Commission Business Accelerator. Initially, Jensen looked into the incubator just because he needed office space for his new business. But after incubator director Michel Bitritto explained the advantages of being here, it was clear to him that he wanted to be among the group of peers at the incubator that are seeking to become successful businesses in various creative entrepreneurial ways and, in this particular incubator, in a green way. “I felt that this was a great place for me, and it has proven to be that since I’ve been here,” he said.

Agreenability has been headquartered in the incubator since June 2010. In that time, Jensen completed the initial design of the product and manufactured, installed, and tested the first full-size prototype. In addition to reaching milestones in his business, Jensen has been exposed to people and agencies that he would not have known about if he were working on his own. Through the incubator, he has met people from investment companies who meet with the incubator companies, listen to their pitches, and give feedback. The incubator has also introduced Jensen to business consultants, people from the DEP, and to organizations such as the New Jersey Technology Council, Small Business Development Centers, and the New Jersey Economic Development Authority. “All of this is invaluable. You can’t anywhere else pay $260 dollars a month and get that type of exposure.”

Jensen strongly recommends incubators for budding entrepreneurs. “New entrepreneurs can get exposed to people that have been through this type of thing many times before. They may think it’s a daunting task to start a business, and in many ways it is, but if you have people around you to show you the way and make things simpler, it’s not such a big deal to be an entrepreneur. If they have the opportunity to do it, what they need is just somebody to show the way. Incubation is probably the best way I can think of to be a successful entrepreneur.”

NJBIN is a supporter of the Central Jersey Chapter of the National Association of Women Business Owners S.E.E.D Business Plan Competition. Submissions are due by February 25; competition is April 18 in New Brunswick. For details and to receive an application to enter, send an email to EED@nawbocentraljersey.org or visit http://www.nawbocentraljersey.org/seed.html.
Rohrer College of Business Incubator (continued from page 3)

our program,” said Sarah Piddington, interim director of the incubator. “The overall idea for this building is to have academic labs that will spin out university-patented technology into the incubator. Once the new businesses become viable, they would then relocate in typical commercial space in one of the planned buildings in the university-affiliated Tech Park.”

Piddington is well-positioned to help make this cycle of innovation a reality: she also leads a program in project-based learning for undergraduate and graduate students for the business school’s Center for Innovation and Entrepreneurship. The students do market research, business planning, audits, and other basic types of services that businesses—especially startup businesses—need. Some of these students are MBA candidates whose classes meet in the same building where the incubator is located.

Piddington hopes that the students in the project-based learning program and other student-based programs she coordinates will increasingly found businesses and move into the incubator. “We do get some technology ideas coming out of our student business plan competition. If they’re feasible and fit our mission, we encourage the students to come into our incubator program,” she said.

Social Reach, the hugely successful social networking ad company, is an example of the successful integration of the university’s academic programs and the incubator. Social Reach was founded by an alumnus of the entrepreneurship program. “The Center for Innovation & Entrepreneurship did some focus groups for him for a new business venture idea that he was developing while he was a student,” said Piddington. “That was a neat example where we were able to see the evolution of the company from the beginning phase through to being a successful company.”

Piddington’s vision of expansion hinges on Rowan University’s plans to build additional buildings on the tract of land where the incubator is located. The complex will hopefully include additional space for the incubator and a Tech Park where graduates of the incubator and other companies will be able to rent commercial space.

The vision for the future of the program is that the incubator will become a center of medical entrepreneurship for New Jersey. The university just broke ground on a building that will house the medical school’s paramedical program. “It will be three to four years until the medical school is actualized, but the university is already getting revved up, hiring new people—including the new dean of the medical school—who are very interested in medical entrepreneurship,” said Piddington.

Piddington has intimate knowledge of the incubator because it was her own MBA project to write the proposal for its formation. When she graduated, the Rohrer College of Business hired her as a project manager. When the incubator director left in 2008, she took over in her current position as interim director.

“It’s been a learning experience,” said Piddington. “I knew about the National Business Incubation Association and quickly got involved with the New Jersey Business Incubation Network. The NJBIN members provided direction and guidance. A lot of them took the time to meet with me and I also visited a lot of the other incubators in the network.”

For the near future, the incubator is recruiting companies that have potentially patentable technology and a high potential for growth. The incubator is also launching a new program that will enable companies to participate in incubator services without being physically located at the incubator.

Want more NJBIN News?
Additional Incubator News and feature articles can be found in our e-newsletter. Follow the link from our homepage at http://www.njbin.org/.
### New Jersey:

#### The Right State for Entrepreneurs and Business Venture Development

Are you a visionary entrepreneur with an awe-inspiring business plan? Do you have the technical know-how to be competitive? If yes, an incubator in our network could be the next home for your business. To find out more, send an email inquiry through the “contact us” form on our website (www.njbin.org/), or call NJBIN president Gerald (Jerry) Creighton, Sr. at 973-643-4063, ext. 101.

<table>
<thead>
<tr>
<th>Incubator Name</th>
<th>Description</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>Burlington County College High Technology and Life Science Incubators</td>
<td>assist entrepreneurs with commercially attractive technology and science ideas to start and grow their companies.</td>
<td>Contact: Isabel Thompson 856-222-9311 x2800</td>
</tr>
<tr>
<td>The Commercialization Center for Innovative Technologies</td>
<td>assists start-ups to become successful companies that will strengthen the economy by commercializing technologies and creating jobs.</td>
<td>Contact: Donald Shatinsky 732-729-0022</td>
</tr>
<tr>
<td>The Picatinny Innovation Center</td>
<td>works with the US Army development organizations to bring products to market based on DOD technologies, while making new &quot;high tech&quot; products available to the ARM.</td>
<td>Contact: Mark Merclean 973-442-6400</td>
</tr>
<tr>
<td>The Rutgers Food Innovation Center</td>
<td>provides business and technology expertise to food and agribusinesses in NJ and utilizes its outreach capacity to reach the food industry throughout the nation.</td>
<td>Contact: Margaret Brennan 856-459-1900</td>
</tr>
<tr>
<td>The Enterprise Development Center</td>
<td>at NJIT is NJ’s oldest and largest incubator for technology and life-sciences companies, having graduated over 79 successful businesses since its start-up in 1988.</td>
<td>Contact: Jerry Creighton, Sr. 973-643-4063</td>
</tr>
<tr>
<td>The Rutgers-Camden Business Incubator</td>
<td>encourages businesses to locate in Camden and assists them with low-cost technical support and mentoring for successful startup.</td>
<td>Contact: Suzanne Zammit 856-479-9044</td>
</tr>
<tr>
<td>Rowan University's Rohrer College of Business Incubator</td>
<td>is supported by the College of Business and managed by the Center for Innovation &amp; Entrepreneurship.</td>
<td>Contact: Sarah Piddington 856-256-4126</td>
</tr>
<tr>
<td>The New Jersey Meadowlands Commission Business Accelerator</td>
<td>provides a unique opportunity for entrepreneurial companies focused on alternative energy and green technologies and services.</td>
<td>Contact: Michel M. Bitritto, PhD 201-438-1245</td>
</tr>
<tr>
<td>The Rutgers EcoComplex</td>
<td>delivers on its four mission areas of solid waste management, renewable energy, water resources, and controlled environment agriculture.</td>
<td>Contact: David Specca 609-499-3600</td>
</tr>
<tr>
<td>The Sustainable Business Incubator</td>
<td>is a program of the Institute for Sustainable Enterprise at Fairleigh Dickinson University's Silberman College of Business.</td>
<td>Contact: Jonathan Cloud 908-306-9075</td>
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The National Business Incubation Association (NBIA) is the world’s leading organization advancing business incubation and entrepreneurship. Each year, it provides thousands of professionals with information, education, advocacy and networking resources to bring excellence to the process of assisting early-stage companies. An elected, voting board of directors representing the world’s leading incubators governs the association.

The New Jersey Business Incubation Network (NJBIN) is a collaborative statewide community of business experts, resources and facilities dedicated to enhancing the commercial success of early-stage entrepreneurial companies, growing higher paying jobs in New Jersey and supporting the Economic Growth Strategy for the State.

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