

MINNESOTA

CUP™

PRESENTED BY DAVE & CAROLYN CLEVELAND
AND THE HOLMES CENTER FOR ENTREPRENEURSHIP



GAME-CHANGERS OF TOMORROW

2011 Minnesota Cup

Competing alongside some of the strongest participants in the history of the entrepreneurial contest, AUM Cardiovascular won the grand prize with its device that can detect clogged arteries in less than 20 seconds.

DIVISION WINNERS PICTURED ABOVE: (FRONT) ADISACK NHOUYVANISVONG AND COREY THOMPSON, NAIKU; MARIE JOHNSON AND CHRISTOPHER SCORZELLI, AUM CARDIOVASCULAR; MARY MORSE, MEGAN HANSEN, AND SHAHZAD GHAFAR, HOURCAR (BACK) KEVIN SAMPERS, NAIKU; JON SIMON, SUPREME ENERGY PRODUCTS; ERIC SCHAUPP, TESGEN; TADD JOHNSON AND ADAM HEGLAND, SUPREME ENERGY PRODUCTS; CHRISTOPHER BINEHAM AND CHRIS DUFFRIN, HOURCAR; BRADEN KROLL, ANSER INNOVATION; MATT HUDSON, TESGEN; LISA LAVIN, ANSER INNOVATION

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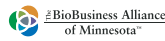
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GENERAL MILLS



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Enriching the Entrepreneurial Ecosystem

Stories by Suzy Frisch

MINNESOTA'S CULTURE OF INNOVATION KEEPS GETTING STRONGER THANKS TO THE MINNESOTA CUP COMPETITION, WHICH CONTINUES TO GAIN NEW SPONSORS AND MENTORS THAT SUPPORT ITS MISSION.

For those seeking proof that the Minnesota Cup has done great things for the state's entrepreneurial culture, consider these numbers: Finalists from the past two years collectively attracted \$32 million in capital. More than 1,000 budding entrepreneurs entered the 2011 competition to vie for \$185,000 in prize money—an increase from last year's \$130,000 pot. And new organizations keep signing on as sponsors, while the pool of volunteer mentors grew to nearly 50 this year.

The free annual business contest, now in its seventh year, has evolved into a major part of Minnesota's entrepreneurial culture, giving participants a forum for testing out and improving their ideas. Since Scott Litman and Dan Mallin launched it with the University of Minnesota, Wells Fargo, and the State of Minnesota as partners, it has become a force for innovative good.



Scott Litman and Dan Mallin, Minnesota Cup cofounders

Just ask the 6,000 entrepreneurs who have competed since the first competition. Many say the Minnesota Cup helped power their company's success, thanks to its deadlines and prowess at opening doors to resources, networks, and financing.

"I think we've played a significant role in making Minnesota a better place to launch a business," says Litman, a veteran entrepreneur. He and Mallin are co-managing partners of Magnet 360, a network of agencies that provide integrated marketing solutions to companies nationwide. "Before 2005 there was no statewide competition; mentors weren't working with entrepreneurs to this level."

Getting Better All the Time

Minnesota Cup participants compete in one of six divisions—BioSciences, Clean Technology & Renewable Energy, General, High Tech, Social Entrepreneur, or Student—and they vie for their division title and the grand prize. It's a high-stakes battle that can mean real money, including \$25,000 for the grand-prize winner and \$25,000 for most division winners (the student winner gets \$10,000 and the social entrepreneur winner gets \$20,000). Division runners-up receive \$5,000, a new prize this year.

Participants submit an executive summary of a business plan to compete, and those who advance

GRAND-PRIZE REVIEW BOARD

Some members of this review board also judged a specific division. They are listed with an asterisk on the appropriate review board sidebar on the following pages. Those who exclusively served on this board are:

- | | |
|---|---|
| Kate Barr
Nonprofits Assistance Fund | Gary Holmes
CSM Corporation |
| Dan Carr
The Collaborative | Todd Johnson
Reuben Johnson & Son, Inc. |
| Dave Cleveland
Riverside Bank | Jeff Kemink
Wells Fargo Bank, N.A. |
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| Leslie Frecon
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Minnesota Department of
Employment and Economic
Development |
| Skip Gage
Gage Marketing Group | Dale Wahlstrom
The BioBusiness
Alliance of Minnesota |
| Morris Goodwin
Amherst H. Wilder Foundation | |

to later rounds of the contest have their plans evaluated by industry leaders, lawyers, business experts, venture capitalists, and others.

Throughout the competition, participants have opportunities to attend events sponsored by professional services firms

Additionally, the Gary S. Holmes Center for Entrepreneurship at the U of M's Carlson School of Management pairs semifinalists with mentors from the business community. They offer insight about competitors' business plans and advice such as how to prioritize during the start-up process.

"We have extremely strong retention from the mentors, and I think they enjoy the process and enjoy giving back their time," says John Stavig, professional director of the center. "One of the best things Minnesota has going for it is a very supportive community for entrepreneurs, and they are very willing to help out."

In addition to returning mentors, many past competitors who didn't become finalists re-enter the competition to keep refining their business plans, thus creating a stronger pool of competitors. "Every year, the quality keeps getting better, whether it's the quality of the entries and participation or the quality of support that companies receive during the process," says Mallin. "There are more opportunities to network with people and sponsors, and some of that is driven by corporate support."

Contest Brought to You By...

The Minnesota Cup started with the sponsorship of Riverside Bank founders Dave and Carolyn Cleveland, whose endowment at the U of M helps fund the prize pot. Over the years, the competition has continued to attract major corporate sponsors, including Carlson, Digital River, General Mills, and Xcel Energy.

Another organization that more recently began sponsoring the competition is the Arrowhead Growth Alliance, a public-private partnership that fosters economic development in northeastern Minnesota.

Many sponsors back the Minnesota Cup because they want to keep the state's economy thriving. Carlson, together with the Carlson Family Foundation, became a lead sponsor last year with the core belief that a vibrant business community will maintain Minnesota's cherished quality of life. Company Chairwoman Marilyn Carlson Nelson also views the sponsorship as a continuation of her family's support of the Carlson School; she especially admires the competition's Student division and its mentoring of student competitors, says David Nelson, executive director of the foundation (no relation to Carlson Nelson).

"Minnesota has benefited from a truly remarkable legacy of business and social entrepreneurship, and we feel that the Minnesota Cup helps support and inspire a new generation of entrepreneurs focusing on innovative solutions," says David Nelson.

Earlier this year, General Mills committed to a three-year lead sponsorship.

"As a company that has made Minnesota its headquarters for more than a century, we fully understand the important role new and fresh ideas have in keeping Minnesota not only a great place to do business but also an attractive place to live and work," says Jeff Peterson, director of innovation and strategy for the General Mills Foundation.

Many sponsors get behind the Minnesota Cup partly as a way to help their own industry. That was the case for Digital River, whose executives long for the era when Minnesota was a gigantic powerhouse

AWARDS AND BENEFITS

Finalists receive:

- The opportunity to be featured in a December supplement in *Twin Cities Business*
- "Winning Investment Presentations" training by Spoken Impact
- Detailed feedback about their final written entries and oral presentations
- The opportunity to present their business plans to an esteemed review board of prominent business leaders and investors

Semifinalists receive:

- An invitation to attend a semifinalist reception at the University of Minnesota's Carlson School of Management
- The opportunity to be paired with a University of Minnesota alumni mentor with extensive entrepreneurial experience

Entrants receive:

- The opportunity to learn about resources available to entrepreneurs and attend Minnesota Cup-sponsored events
- Networking with Minnesota Cup supporting partners and other entrepreneurs
- A chance to improve their pitch and put together an executive summary of a business plan through entry requirements
- A complimentary one-year subscription to *Twin Cities Business*
- A valuable experience that will help advance their business ventures

ENTREPRENEUR OF THE YEAR AWARD

In 1999, Monica Nassif launched the Caldrea Company, aiming to reinvent the category of household cleaning products. She grew the company into one whose nontoxic products are now sold through three brand strategies in more than 3,000 stores across the United States.

Nassif sold Caldrea to SC Johnson in 2008, but her vision and leadership earned her

the 2011 Entrepreneur of the Year Award from the University of Minnesota.

"She transformed a 'tired and toxic' category into something customers enjoyed," says John Stavig, professional director of the university's Gary S. Holmes Center for Entrepreneurship. Nassif frequently speaks to entrepreneurship classes at the U and is chair of the Carlson School's Undergraduate Advisory Board.

in the computing industry, or the 1990s, when companies attracted significant venture capital, says Tom Donnelly, president and COO of Digital River, an e-commerce partner for businesses globally. Getting involved with the Minnesota Cup as the lead sponsor of the High Tech division encourages entrepreneurs with strong ideas and nurtures high-technology students in the state, who eventually could become Digital River employees, says Donnelly.

"The Minnesota Cup is one of the few forums we have in the Twin Cities where great ideas can get some visibility and entrepreneurs can get access to people who can help them succeed. Our whole economy in the United States is built on the backs of small businesses, and we tend to forget that."



BIOSCIENCES DIVISION WINNER & GRAND-PRIZE WINNER

Division hosted by:

Fredrikson
& BYRON, P.A.

Division supported by:



Lurie Besikof Lapidus
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Canada

AUM Cardiovascular



Christopher Scorzelli, Nancy Ness, Marie Johnson, and Paula Skjette

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*On grand-prize review board in addition
to this division review board

Marie Johnson created a non-invasive way to detect coronary artery disease in order to prevent more spouses and children from having to live without a loved one. It's a painful existence, and she should know—her husband died at 41 from a heart attack attributed to blocked arteries.

After years of research, three post-doctoral fellowships, and extensive testing, Johnson invented a handheld device that can detect clogged arteries in less than 20 seconds. She developed a signature algorithm that is a strong indicator of blockages or narrowing of the arteries.

Every year, 1.1 million Americans have a documented heart attack and 350,000 succumb to sudden cardiac death. One major heart attack culprit, blocked arteries, is sometimes difficult to detect through traditional measures like stress tests—and more accurate diagnostic tools can cost thousands. That's why AUM's CADence device is especially critical, says Johnson, a biomedical engineer who is CEO of the Northfield-based company.

"I want to eradicate needless deaths due to heart disease," she says. "Imagine if you could detect everyone who is developing heart disease and help them start making changes right away. That's

my ultimate goal, and I can't wait until we start seeing real changes in outcomes and people are publishing studies saying we're making a difference."

Some unhappy coincidences led Johnson to develop her technology. She often used her husband as a guinea pig while working on a project with 3M to create heart murmur-detecting electrical stethoscopes. Believing he was healthy, Johnson collected reams of data on his heart. When he died in 2002, she scoured the data, eventually identifying a persistent signal in his left anterior descending (LAD) artery. It's known as the widow-maker for its lethal nature when blocked.

From her husband's data, Johnson created the telling algorithm based on acoustic signals from a

PRIZES FOR WINNER

- \$25,000 in seed capital
- Premium access to the Minnesota Angel Network
- Legal assistance from law firm Fredrikson & Byron
- Accounting assistance from Lurie Besikof Lapidus & Company, LLP
- Scholarship to The Collaborative's 25th annual Minnesota Venture & Finance Conference
- Video production and three months of hosting via Startupshoppe's Minnesota Startup Showcase

FINALISTS

RUNNER-UP: QuickCheck Health

Instead of dragging a sick child or yourself to the doctor, wouldn't it be nice if you could just administer an over-the-counter test to confirm your suspicion of illness? To meet this need, QuickCheck Health created its "clinic in a box," a series of rapid home tests that people can take at their convenience, saving themselves and the health care industry time and money.

"Typical doctor's visits cost \$207, and even something as simple as a Minute Clinic strep test still costs \$129, and then 75 percent are negative. [Annually in the United States], we're spending \$8 billion on negative strep tests," says Tom Henke, president and CEO of the Excelsior-based company, who spent 25 years in the health plan world. "We also don't have enough doctors in America right now, and to use a very critical resource on things that don't need their level of expertise is a sad use of their talent."

QuickCheck Health will sell its electronic reader and two test strips for \$10. Test takers get a code to enter on the company's Web site, which provides them with a positive or negative result. If it's positive, they can pay \$35 for an e-visit with a nurse or doctor in their state; that person can call in a prescription. If the test is negative, the consumer gets information on false negatives and symptoms to monitor.

Henke aims to secure FDA approval in early 2012. QuickCheck Health will first offer tests for urinary tract infections, but it also plans to make tests for strep, influenza, diabetes, and other conditions.

MikrobEX

The MikrobEX tagline says it all: The company makes "simple solutions for gut-wrenching problems." It developed a novel way to deliver healthy microbes to people suffering from intestinal disorders, restoring patients' microbial balance and keeping gastrointestinal illnesses at bay.

The Fridley-based company is led by founder, President, and CEO Lee Jones—a former Medtronic executive who also previously led Inlet Medical. While working at the University of Minnesota, she was inspired by biotechnology similar to MikrobEX's and saw huge potential. She brought in two successful medical device entrepreneurs and financiers as co-owners—Erwin Kellen and Michael Berman, who had his own applicable intellectual property. The team was ready.

MikrobEX will first target those suffering from *Clostridium difficile*, an infection that generally hits hospital patients on antibiotics—about 500,000 people a year and growing 20 percent annually. The current treatment involves giving more antibiotics, which can exacerbate the infection by wiping out all bacteria, healthy or not. The company's solution is to take microbes collected from healthy people and deliver them to the intestine via a capsule, colonoscopy, or other procedure.

Jones got inspired to pursue the company because she believes MikrobEX can bring the simple solution quickly to market. "I also think biological materials and biotherapy will be the wave of the future in health care," she adds. "We'll still need drugs and devices, but the real innovation will come from the biological area."

blocked LAD. Next she developed the CADence system for discovering arterial blockages in people's hearts.

In 2007, Johnson was recruited from Stanford University to concept and then direct the University of Minnesota's Medical Devices Fellows Program. In that role, she trained cross-disciplinary teams of scientists, physi-

cians, and engineers to develop commercially viable medical devices. But she wasn't making much progress on her own project. After the U passed on her technology, Johnson realized she needed to more aggressively advance the CADence device.

"I believe that everything happens for a reason, and I wouldn't be working on this and

SEMIFINALISTS

- Awear Technologies—Rod Greder
- BPS Technologies—Brian Sinykin
- General Blood—Ben Bowman
- Omicron Health Systems—David DuChene
- OrthoCor Medical—John Dinusson
- Qualtrix—Rashaun Sourles
- Walkasins—Joseph Leach

have my husband die if it wasn't for a reason," says Johnson. "I had to do something to make sure that other women and kids don't have to go through this. There is a cure, and I needed to figure out this link."

Johnson left the U in April 2011 to work on AUM full time and built a team of 13. Earlier this year, AUM earned nearly \$250,000 in grant money from the IRS, and it is about to close on its first round of equity financing.

"We couldn't have been more impressed with the CEOs, the teams, the concepts, and hope to have this level of competition... be the new standard."

—Judge Jeremy Lenz, BioBusiness Alliance of Minnesota

A 330-patient study that compares CADence to a traditional angiogram is now underway at the University of Minnesota, and Johnson is confident that the results will affirm the strength of the device. It even caught blockages in a prominent Twin Cities CEO and a potential investor from North Dakota.

CADence will be ready for FDA review and clinical trials next spring, and it should be approved and ready for market by third-quarter 2013. AUM will initially sell to cardiologists, but Johnson hopes to eventually sell to other medical professionals and to consumers also.

Each test will cost about \$300. Approximately two-thirds will be used to cover medical professionals' fees associated with interpreting the results—and the remaining one-third will go to AUM.



CLEAN TECHNOLOGY & RENEWABLE ENERGY DIVISION WINNER

Division hosted by:

Fredrikson
& BYRON, P.A.



Division supported by:



Supreme Energy Products



Jon Simon, Tadd Johnson, and Adam Hegland

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Todd Taylor*

Co-Chair, Clean Technology Group, Fredrikson & Byron, P.A.

*On grand-prize review board in addition to this division review board

The way builders construct homes hasn't changed radically in decades. But if Tadd Johnson and Adam Hegland have their way, the construction industry is in for a big shift. Long-time residential builders and remodelers, the partners developed a radically new way to make homes and commercial buildings more energy efficient.

They spent more than two years fine-tuning their home-insulating Energy Max Panels, comprised of a higher-density version of the material used to make coolers. What's interesting is where the panels are installed—on the outside of the stud walls instead of the inside. Builders install the panels on floors, walls, and ceilings and then seal the seams with foam, slashing energy costs 50 percent to 70 percent, Johnson says.

The traditional way to build involves framing a house and its interior walls; covering the stud walls with plastic sheeting, which acts as a vapor barrier; and filling a six-inch cavity with fiberglass insulation. It all gets covered with house wrap and dry wall. Problem is, the cavity traps moisture that can spawn mold, especially because houses are being built "tighter" in pursuit of energy efficiency. Additionally, the insulation

degrades and loses its effectiveness over time.

That's why Hegland and Johnson devised the concept of insulating just beneath a house's exterior material—like vinyl, wood, composite siding, or stucco. Their panels are made of expanded polystyrene, which has low thermal conductivity and doesn't allow heat or cold to move through it.

"You can only get so much performance out of fiberglass insulation and vapor barriers, and it opened our eyes to the inefficiencies of how people have built for the last 30 years," says Johnson, co-owner of Lakeland Custom Remodeling and Contracting in Lakeville. The partners initially planned to just use Energy Max to Lakeland's advantage, but then they kept hearing from industry

PRIZES FOR WINNER

- \$25,000 in seed capital
- Premium access to the Minnesota Angel Network
- Legal assistance from law firm Fredrikson & Byron
- Accounting assistance from Eide Bailly, LLP
- Scholarship to The Collaborative's 25th annual Minnesota Venture & Finance Conference
- Video production and three months of hosting via Startupshoppe's Minnesota Startup Showcase

FINALISTS

RUNNER-UP: Electric Yacht

Sailor and electrical engineer Scott McMillan combined his two passions to create an electric engine for boats, turning his hobby into a growing business. He believes that Electric Yacht is already the largest electric sailboat engine company in the United States, and it sells its inboard motors around the world.

Sailors typically use gas or diesel engines to power their vessels as they are leaving the marina or when the wind dies down, but traditional engines emit exhaust and take time to warm up. "With an electric motor, you flip a switch and it's on—and it doesn't disturb the atmosphere or the ambience," says McMillan, president and CTO of the Golden Valley–based company. "When our motor is running, the sensation isn't a lot different than when you are sailing. It's more green and you're eliminating emissions into the air and water."

McMillan started Electric Yacht in late 2007 and was selling his engines just a few months later. He quit his day job in 2010 to pursue the company full time. Electric Yacht is concentrating primarily on the sailboat market, but it eventually will expand to power boats, especially as batteries continue to get bigger and better, says CFO and interim CEO Kerry Rosenhagen.

So far, Electric Yacht has sold about 125 engines around the world, and it has plenty of room to grow in the \$500 million sailboat market. Although the company has competitors, it became the American market leader by making its engines very easy to install, says McMillan.

LightingHouseUSA

In the United States, 20 percent to 25 percent of the electricity we use is for lighting, and until recently, there weren't many options when it comes to energy-efficient bulbs. Sudhir Singh, founder and CEO of Plymouth-based LightingHouseUSA, wanted to offer alternatives to the commercial market with light-emitting diode bulbs, which are 60 percent to 90 percent more energy efficient than traditional bulbs.

An electrical engineer who worked in IT, Singh began testing his idea a few years ago thanks to a State of Minnesota grant. His digital technology proved promising, emitting a better quality of light that produces significantly less heat than traditional bulbs. He began his company in 2009 to focus on the commercial, industrial, and roadway lighting sectors.

"A lot of cities are really hurting with their energy costs; it's their third-highest expense. Lighting is a big expense in places that have bulbs running 24 hours a day, like highways, parking garages, and jails," says Singh. "The solution we have really eliminates the extra cost and maintenance—it's a big relief."

Singh recently added a sales force to help sell his bulbs across the nation. He expects that LightingHouseUSA will have no problem sealing the deal with its made-in-Minnesota bulbs when potential clients hear that they last up to 25 years thanks to the solid-state technology that replaces the fragile filaments in traditional bulbs. And replacement projects aren't as involved or expensive because clients don't need to buy new fixtures to use LightingHouse's bulbs.

professionals that it was "game-changing" technology. That convinced them to incorporate as Supreme Energy Products in 2010 to sell their patent-pending product.

While working their building jobs, they opened their new business in Cannon Falls. They aim to reduce energy use in the United States, where buildings account for 42 per-

cent of energy consumed.

Johnson and Hegland believe they have some iron-clad selling points: In addition to the panels' energy efficiency, the material also is recyclable, reclaimable, and mold-resistant. Builders save time and money from the panels because they don't need to complete the four-step interior insulating process; without a

SEMIFINALISTS

- Cryogenic Separation & Deconstruction—Tom Dokken
- IrriGreen—Gary Klinefelter
- Olaf Industries—Clint Deraas
- SkyPro—Jeff Piehl
- T3 Scientific—Siu Yue Tam
- Valu Lamp—Patrick Delaney

six-inch stud cavity, they can use less expensive 2x4s instead of 2x6s.

Johnson says that even if Supreme Energy Products captures just 0.75 percent of the U.S. residential market within the next five years, it will generate \$73 million in gross revenue. "We don't have to capture that much market share for our numbers to be huge," he says. "We're replacing the

"For two guys who build houses all day, they saw a problem and found a way to solve it that is low-cost, easy to use, and works extremely well."

—Judge Todd Taylor, Fredrikson & Byron, P.A.

vapor barrier, and we're also capturing their market share. Same with fiberglass. We wrap it all into our product."

Those estimates don't include the commercial market, which the partners also plan to enter. Commercial building could be quite lucrative, where projects might involve 800 sheets of Energy Max compared to 250 to 300 sheets on a home.

Supreme Energy Products is well on its way to getting its panels into the commercial and residential marketplace thanks to its Minnesota Cup division win, says Johnson. The company now has funds to get certifications and guide specs written so that architects can specify Energy Max on their blueprints.

"I know it's a cliché, but we want to revolutionize the construction industry," Johnson says. "Now we have a product that saves time, it's cost-effective, and it has multiple advantages. We feel we have a game-changer."



GENERAL DIVISION WINNER

Division hosted by:



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MASLON
MASLON EDELMAN GORMAN & BRAND, LLP

Anser Innovation



Braden Kroll and Lisa Lavin

There are pet owners, and then there are pet owners—those who consider themselves pet parents and treat their animals like members of the family. These owners detest leaving their animals alone, and they crave the serenity of knowing that their furry friends are calm and happy without them.

Anser Innovation LLC, a Burnsville-based technology company, developed a new product to open the lines of communication between pets and their owners, putting pet parents at ease. Called PetChatz, the device creates a remote connection and multisensory interaction between owners and their pets, allowing owners to see, hear, and talk with their animal—and even dispense treats and comforting smells.

Earlier this year, CEO Lisa Lavin teamed with inveterate inventor Mark Kroll, who holds the most medical device patents in the world. He came up with the PetChatz concept and has two patents and one pending patent for the technology. A seasoned entrepreneur herself in animal care and health care products, as well as an authority on veterinary radiography, Lavin knew this pet-focused telecommunication device was a winner.

“When Mark talked about this pet telecom-

munications product, light bulbs started going off,” says Lavin. That’s because 73 million households in the United States have pets, and pet owners collectively spent \$48.4 billion on their animals in 2010. Additionally, overall spending on pets has doubled in the past decade.

Anser will focus on the pet parent category, about one-third of all pet owners, who spend 50 percent to 66 percent more on their pets than the average animal owner.

“This is a new way for people to connect and interact with their pets, and it’s really fun because it provides people with peace of mind,” adds Lavin.

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Senior Vice President,
Grand Rapids State Bank

*On grand-prize review board in addition
to this division review board

PRIZES FOR WINNER

- \$25,000 in seed capital
- Premium access to the Minnesota Angel Network
- Business organization (or services of similar value) from law firm Maslon
- Accounting assistance from Lurie Besikof Lapidus & Company, LLP
- Scholarship to The Collaborative’s 25th annual Minnesota Venture & Finance Conference
- Video production and three months of hosting via Startupshoppé’s Minnesota Startup Showcase

FINALISTS

RUNNER-UP: PickPointz

Most sports fans don't need much incentive to watch the game or even engage in a friendly wager. Jim Ryan, a veteran of the loyalty program industry, developed a hybrid sports game/loyalty program called PickPointz for sports enthusiasts, who earn points by making predictions about sports events.

"Brands are looking for ways to have a dialogue with consumers and market to them," says President and Owner Ryan, who used to be CEO of Carlson Marketing Group. "The problem is, most loyalty programs are mildly interesting and don't keep people coming back on a regular basis. PickPointz is an interactive sports game that's really fun, but built behind it is a marketing engine."

Players earn points on St. Paul-based PickPointz by correctly predicting details about a sports event, such as total runs scored in a baseball game or the football score at halftime. Users can redeem their points for gift cards or merchandise, like electronics or team apparel. A unique twist is that players can change their predictions throughout the game, meaning that any participant can win some points just by watching. But they earn more points if they make a correct prediction early on.

Ryan aims to take advantage of the \$60 billion sports marketing sector by offering sponsorships and partnerships for companies to connect with PickPointz users. At this time, fans of most Minnesota professional sports teams and the Green Bay Packers can earn points through PickPointz, which generates enthusiastic and repeat users, Ryan says.

Owners can plug PetChatz into the wall at home or in a hotel room, or bring it to the kennel where their pet is staying. Through an application on their computer or smartphone, they can observe their pet, or they can speak to the animal and call Scruffy over. They can emit comforting smells to the pet or dispense a treat. And that's another ingenious aspect of the business, Lavin says:

For My Children

As Michael Wright thought about how he wanted to pass his legacy onto his five children, he realized that he had disparate memories, thoughts, and lessons to share with his children at various stages of their life cycles.

This serial entrepreneur realized he was on to his next big idea. Wright would start a company that allows people to share themselves more personally and individually—and securely—with loved ones, creating living scrapbooks for them to treasure.

Called For My Children, the Web site lets users pass on important details like passwords and account numbers for bank accounts or trusts, putting all the information in one safe, secure location.

But even more significant is the Web site's service that helps customers share photos, make videos, tell stories, and convey family histories and values to others.

"If you've ever been through [the death of a loved one], you get a box of stuff. The box of stuff has meaning but it doesn't have the stories that go with it," says Wright, founder and CEO of For My Children in Chanhassen. "If you digitize it, it has an impact in terms of making it a lot simpler and easier and more directed at the right people."

Customers pay a monthly fee, and they direct the company to notify loved ones of their relative's pages at the time and in the manner they specify.

All of the information, media, and accounts would be stored securely in the cloud.

Anser will sell the PetChatz device, but it also will bring in revenue from the consumables that go with it, such as the scent packs and treats—the classic razor-blade business model. Anser already lined up a strategic partnership with a premier pet food manufacturer to sell co-branded treats, which opens up the established company's sales channels to PetChatz.

SEMIFINALISTS

- Asset Record Company—Josh Schwingler
- Bee Free Honee—Katie Sanchez
- Early Learning Labs—Steve Johnson
- EvaTrax—Jonathan Keller
- Fitness Formulary—Daniel Lynch
- Perfekt—Keith Estenson
- Widmer Boat—Andy Stone

With no regulatory approval required, the device will be available at pet stores and online by 2012. Lavin expects to break even in the first year of sales on Anser's way to selling \$55 million in devices in its fifth year. With treat packs, sales will be even higher. PetChatz won't be Anser's only product. Lavin says there are other scenarios for which its technology could facilitate remote connection and interaction that's not possible now.

"This year's General division winner...has a CEO who is one of the best presenters I have heard."

—Judge Jeffrey C. Robbins, Messerli & Kramer, P.A. & AngelPolleNation, LLC

For example, the company sees opportunity for its technology to help loved ones assist aging adults with medication management. The technology also could provide more interactive communication between parents and older children who have special needs or require extra help. Anser is now assessing those opportunities and working on the intellectual property for those channels.

"We're going to play in more than just the retail pet space," says Lavin, who has 20 years of senior leadership experience building businesses and commercializing new products and services—including a stint at 3M.

Lavin and her founding partners, Kroll and his son Braden Kroll, have high hopes for PetChatz. The company conducted a national survey with 430 consumers in 28 states: 76 percent of pet parents gave the product and their interest in buying it the highest possible survey ranking.



HIGH TECH DIVISION WINNER

Division hosted by:



Naiku

Division supported by:



Lurie Besikof Lapidus
& Company, LLP



Adisack Nhouyvanisvong, Kevin Sampers, and Corey Thompson

“The competition in this year’s division was very tight—one of the best fields of companies we have seen.”

—Judge Marc Usem,
Usem Bergstrand Capital Management

PRIZES FOR WINNER

- \$25,000 in seed capital
- Premium access to the Minnesota Angel Network
- Business organization (or services of similar value) from law firm Gray Plant Mooty
- Accounting assistance from Lurie Besikof Lapidus & Company, LLP
- Scholarship to The Collaborative’s 25th annual Minnesota Venture & Finance Conference
- Automatic acceptance into Project Skyway’s highly selective spring 2012 bootcamp
- Video production and three months of hosting via Startupshoppes’s Minnesota Startup Showcase

Being a student in America means taking numerous standardized tests. And while these assessments help districts see how schools are performing, the data often isn’t used to improve the individualized learning of each pupil. A team of software and educational testing experts came together to form Naiku, a Minneapolis-based company that develops software for teachers to assess their students and then tailor instruction to each individual.

The ultimate goal is to help teachers engage students more deeply in their learning in hopes of improving their academic performance, says Naiku President Adisack Nhouyvanisvong, an educational testing expert. He partnered with CEO Corey Thompson, former director of software methods at Plato Learning, and COO Kevin Sampers, a long-time school board member and former research director for the Association of Metropolitan School Districts.

Together, they launched Naiku (which means teacher in Laotian) in November 2010, leaving their full-time positions and bootstrapping the company to develop the software-as-a-service offering. During its creation, they looked for ways to make students more active learners while changing the teacher-student dynamic. “We want to help the world like teachers do. We see ourselves as

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*On grand-prize review board in addition to this division review board

FINALISTS

RUNNER-UP: Qonqr

It took a weekend competition to get Qonqr up and running on its way to helping users battle for world domination. A team of seven developers and friends dreamed up Qonqr, pronounced conquer, a mash-up of the board game Risk and social media apps through which users earn points for publicizing their locations.

Qonqr is a multiplayer strategy game with mobile, geographic, and social media features that players download to their computers or phones. Users send nanobots into battle to try to wrest control their city, and then they earn weapons to fight for supremacy of other cities and countries around the world.

"The gaming industry is predicting that the combination of geo, social, and mobile will be the fastest-growing segment in the gaming market," says COO Scott Davis. "There aren't that many games out there that combine playing with friends online or on your phone."

The game is free. Qonqr will get revenue from premium play, where users pay for better weapons or to upgrade their experience. Qonqr will also sell sponsorships that let players battle for domination of a sponsoring company or give rewards for playing at a partner business.

Gaming is a lucrative market with consumers spending \$60 billion a year—\$10 billion of which goes to mobile and social media. Qonqr is currently developing a richer version of the game, with three team members working for the company full time.

Cram Worldwide, LLC

The Internet just wasn't built to stream loads of high-definition and 3D video, and it would cost trillions of dollars to bolster broadband networks to accommodate mounting demand. Technology pioneer Daren Klum wondered: Why not come at it from the hard drive end?

Co-founder of Hardcore Computer and a former employee of numerous technology and entertainment companies, Klum started developing his technology about two years ago and formally launched White Bear Lake-based Cram Worldwide in 2010. His team created a device in the form of a cartridge that holds terabytes of content—the entire iTunes library plus hundreds of movies, television shows, and other educational programming.

Cram customers can send data from the cartridge to four types of devices at once—a television, laptop, PC, tablet, or smartphone, making it great for multi-user households, Klum says. Customers get secure access to an unlimited amount of content for a flat monthly fee; those who opt-in for advertising can get a lower rate.

"What really excites me is creating a content solution for the world that unshackles them from the Internet. There needs to be a new alternative because it's too insecure," says Klum.

Cram has already attracted significant investments, including \$100,000 from the University of St. Thomas' William C. Norris Institute. It will launch its product at the Consumer Electronics Show in Las Vegas in January.

PointTunes

There are 2 billion individual rewards accounts in the United States, which together comprise a \$48 billion industry. But \$16 billion of rewards go unused each year because there aren't enough inexpensive prizes available. Enter PointTunes, a Web site that allows consumers to redeem their rewards for digital media.

"The average household has \$600 in stored value on their accounts and \$200 goes unredeemed every year," says Bill Cunningham, founder and CEO of PointTunes of Minneapolis. "There is a lot of money just sitting out there. It's a huge market opportunity."

Cunningham, who worked for many years on loyalty marketing programs, believed he could shake up the industry with a fresh approach. He led PointTunes' development of software that translates many rewards programs' disparate point systems into dollars and then back to points for customers, making it easy for them to use those points for digital media. Rewards programs retain the look and feel of their own sites, with PointTunes serving as the back-end administrator.

PointTunes lined up music and e-book content from five providers, cutting out the middleman, and it drastically slashes costs by offering only digital rewards. The company has been getting great feedback from rewards programs, which struggle to deliver valuable goods for less than \$15.

"I kept hearing that this is the right product at the right time in the industry," Cunningham recalls.

teachers, and there is no bigger job than that," Nhouyvanisvong says. "We want to change the world through educational technology."

Testing is a huge industry, encompassing \$4 billion in 2010 spending; classroom testing accounted for \$1 billion, giving Naiku ample room in which to operate.

Naiku's tests are designed to be interactive, and they allow students to use iPads, smartphones, laptops, or other Internet-enabled devices. Educators create quizzes or

tests that reflect the material they are teaching, get students' result in real-time, and then assess which information students do and don't understand. Pupils can rate how well they believe they know certain information or go back and learn why they got an answer wrong.

"It's an assessment *for* learning, not just an assessment *of* learning," says Nhouyvanisvong. So far, 35,000 students in eight school districts in Minnesota and Iowa are using the software—and Naiku's fee is \$5 per

student per year. The goal is to reach 100,000 students by year's end.

SEMIFINALISTS

- Datometer—Sam Morse
- MOBI Banc—Alvin-o Williams
- OneWay Commerce—Joe Dwyer
- SieEnt—Jacqueline Urick
- When I Work—Chad Halvorson
- Xollai—Robert Malecki



MOSAIC SOCIAL ENTREPRENEURS CUP WINNER

Division hosted by:



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THE SAINT PAUL FOUNDATION



HOURCAR



Mary Morse, Christopher Bineham, Chris Duffrin, Shahzad Ghaffar, and Megan Hansen

Many Americans have a love/hate relationship with their cars—they enjoy the convenience of being able to go where they want when they want but dislike the cost, maintenance, and environmental impact. Since 2005, local residents have been able to ditch their vehicles but still have access to one through HOURCAR, a service of the Neighborhood Energy Connection (NEC) in St. Paul.

By joining HOURCAR for a one-time, \$50 fee, drivers 18 and older can rent one of 32 cars parked at hubs throughout Minneapolis and St. Paul. When members need a vehicle, they can reserve it 24 hours a day, online or by phone. Then that car is theirs for running errands, visiting the doctor, or going on outings to see family or friends.

Members usually save about \$4,000 annually. According to NEC Executive Director Chris Duffrin, the average car owner spends as much as \$7,000 a year, including depreciation, insurance, gas, maintenance, and fixing any damage. Renting through HOURCAR costs either \$5 a month and \$8 an hour or \$15 a month and \$6 an hour, depending on the member's plan, plus 25 cents a mile for gas. Even if users buy a transit pass or occasionally rent a car, too, they still come out ahead, Duffrin says.

"Our basic premise is that for people who can take transit or bike or walk for their daily commute, sharing a car is more cost-effective than owning a car," notes Duffrin. "The average car is used between one and two hours a day, and the vast majority of the time it's just sitting there depreciating in your driveway. If we can take the cost and spread it over a big group of people, you can save a lot of money."

The NEC has found that members eventually use the cars with less frequency as they get used to relying more on mass transit, biking, and walking.

PRIZES FOR WINNER

- \$20,000 general operating grant for capacity building
- Web site redesign from the Nerderly
- 40 hours of consulting from Social Venture Partners Minnesota
- Promotion in Social Venture Partners Minnesota, Minneapolis Foundation, and Minnesota Cup publications, events, and Web sites
- Opportunity to compete against five other Minnesota Cup division winners for the grand prize
- Scholarship to The Collaborative's 25th annual Minnesota Venture & Finance Conference

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FINALISTS

RUNNER-UP: DesignWise Medical

After a 20-year career in the medical device industry, Brad Slaker wanted to do more to directly help people with health problems. He began exploring ways to find deeper meaning in his work and discovered a glaring need for device makers to put more focus on pediatric patients.

"Medical needs for children are such small market or niche opportunities that the return on investment often does not exist. The for-profit industry is not jumping over themselves to solve these issues," says Slaker, an engineer who spent many years at Boston Scientific. "But these unmet needs are affecting kids and their parents and families."

Slaker left his job three years ago to start DesignWise Medical in Minneapolis, creating an all-volunteer organization that develops pediatric medical devices. Simultaneously, DesignWise offers real-world experiences for college students to work on class projects related to pediatric devices; medical device professionals or retirees also can donate their time and expertise. So far, about 200 volunteers have contributed to projects, including more than 100 students.

DesignWise has four products in the works, including the OPOD, a system that provides night-time supplemental oxygen to children at home without the use of a facemask. The firm is almost ready to submit the OPOD to the FDA for approval, and Slaker believes it will be ready for sale in 2012.

GiveMN.org

Ever since online niche giving became a confirmed trend in philanthropy, Minnesota foundations wanted a similar vehicle for local organizations and donors. Led by the Minnesota Community Foundation, numerous philanthropic entities united to launch GiveMn.org in 2009, offering donors a one-stop shop for making targeted donations to local causes.

From schools and scholarships to parks and health care initiatives, GiveMN's charitable opportunities are extraordinarily diverse. Potential donors can search by cause, location, or type of project, and then make a gift to a specific need.

Shortly after it launched, St. Paul-based GiveMn.org created "Give to the Max Day," a 24-hour fundraising event designed to boost participation in philanthropy. The first annual event took in \$14 million.

In total, the nonprofit has raised more than \$33 million for charities across the state and beyond since its inception. Small nonprofits like that they can gain contributions without having to develop their own Web sites to collect them, says Dana Nelson, executive director.

She thinks of GiveMn.org as the Google of nonprofits, where potential donors search for organizations and learn more about them before making contribution decisions. "GiveMN allows nonprofits to put up videos, photos, and tell their stories with copy," Nelson says. "It's a very different way to engage people."

Mind Body Solutions

When professionals at Mind Body Solutions help people with disabilities or their caregivers apply a mind-body approach to their lives, great things happen. Helping disabled people build connections between their mental and physical health allows them to take more control over their well-being. For caregivers, these practices help reduce stress and burnout.

In the long run, the benefits can slash employee turnover and cut health care costs for patients and the industry, says Jennifer Zarth, development director for Mind Body Solutions, a nonprofit.

Matthew Sanford started the Minnetonka-based organization in 2001. A paraplegic, he aimed to help people with disabilities reach their potential with mind-body exercises. The organization offers a variety of services, from adaptive yoga classes for people with disabilities to training for instructors. It also provides restore-the-caregiver programs to help health care professionals prevent burnout, and it provides mind-body training for those with post-traumatic stress disorder.

Amy Samson-Burke, program coordinator and a physical therapist, has seen those services work, most notably at the Courage Center in Golden Valley. After conducting a two-year restore-the-caregiver program there, burnout rates dropped from 72 percent to 26 percent. "Reducing turnover reduces recruitment and training costs for employers, saving money for everyone in the long run," she says.

"They realize they don't need the car as much as they thought they did, and they use us for only a few trips each month," Duffrin says.

Membership has grown steadily from 125 in 2005 to 1,560 today. HOURCAR adds cars as its membership increases, and its leaders expect to bring on 14 more in the next two years. The program's now 29 hubs will also grow to 75 within five years.

Initially, the NEC relied on grants and sponsorships to get HOURCAR up and running. Now the program is break-even, making

it easier to fuel further expansion of cars and hubs. HOURCAR brought in \$436,000 in revenue for its 2011 fiscal year and is projecting revenue of \$630,000 next year.

The NEC is no stranger to entrepreneurship, opening in 1985 with the mission to offer tools for energy-efficient living. The nonprofit first focused on residential energy audits and started a recycling program in St. Paul, which it later spun off as Eureka Recycling. The NEC has grown HOURCAR through methods like word-of-mouth and highly localized

marketing, targeting neighborhoods where hubs are located.

It's gratifying to Duffrin and the NEC that HOURCAR helps people drive less and benefits the environment in the process.

"Attitudes toward car ownership are really changing, and car sharing has a lot to do with that," he says. "It's exciting that people come back to us and say, 'I walk more now; I'm happier. I love this service because I don't have to worry.' They also like that they are saving a lot of money."



STUDENT DIVISION WINNER

Division hosted by:

Gary S. Holmes
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TesGen



Eric Schaupp and Matt Hudson

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Engineering students Matt Hudson and Eric Schaupp are turning a school project into technology that can help 1.6 billion people around the world who lack electricity.

They created a power generator that can run on any fuel source, unlike most generators that require either kerosene, diesel, or gas. As an added bonus, their TesGen generator is lightweight but just as powerful as a traditional generator.

"There are a lot of different competitors on the market that sell their products for emergency back-up power or for taking to their cabin, but every single one of those competitors uses a single fuel source," notes Hudson. "Using two unique technologies, we've developed a way to use multiple fuels. It has an application in the United States but also worldwide."

The generator can be used to provide lighting, power an entire house, or charge devices like cell phones, laptops, or computers for people who live without electricity.

Hudson's and Schaupp's plan for TesGen includes developing a beta prototype and then licensing their technology to generator manufacturers to bring it to market. Another option is

to distribute the generators by teaming with a nonprofit that has an international focus.

TesGen doesn't have a patent on its technology yet, but the partners are pursuing one.

"The biggest thing about our idea is it's truly innovative," Schaupp says. "It's not just a widget or a gadget—it has the potential to help people all around the world and increase their standard of living."

The market potential isn't bad either: In 2012, there will be \$640 million in sales of residential portable power generators in the United States, and that figure is expected to hit \$1 billion in 2015. Worldwide, 9.3 million residential generators were sold in 2009, and the

PRIZES FOR WINNER

- \$10,000 in seed capital
- Premium access to the Minnesota Angel Network
- Scholarship to The Collaborative's 25th annual Minnesota Venture & Finance Conference
- Video production and three months of hosting via Startupshoppes's Minnesota Startup Showcase
- Pro bono legal services from the University of Minnesota Law School's Business Law Clinic

FINALISTS

RUNNER-UP: The CleanGrip

For germaphobes like Cate Lehman, going to the grocery store and holding a shopping cart handle is a cringe-worthy experience—and one that can be literally sickening. More than 450 infants have been hospitalized after getting ill from touching or teething on a shopping cart, according to the Centers for Disease Control.

Lehman thinks she found a solution to this dirty problem: the CleanGrip, an attachment for grocery-cart handles that contains a roll of removable sheets. When incoming shoppers take their carts, they strip off the top layer of paper, recycle it, and then go about the store assured that they are using a clean handle.

Lehman thinks she found a solution to this dirty problem: the CleanGrip, an attachment for grocery-cart handles that contains a roll of removable sheets. When incoming shoppers take their carts, they strip off the top layer of paper, recycle it, and then go about the store assured that they are using a clean handle.

"I'm such a germaphobe at the grocery store, and in winter, I will wear my mittens when shopping so I don't need to touch the cart. Stores are offering wipes, so they are concerned about it," says Lehman of Plymouth. "The CleanGrip is an added value because it gives customers a clean cart, and stores can guarantee a clean shopping experience."

Lehman developed the concept as a class project while she was an entrepreneurship student at the University of St. Thomas. She decided after graduating last spring that she would pursue her business idea. She's using her winnings from the Minnesota Cup to pursue a patent on The CleanGrip, and she's also working to design and prototype the product. Ultimately, she plans to target sales to high-end grocery stores.

ProtectRx

Derek Dahl wants to keep other people from going through the experience he had as a drug addict. He got into a family member's prescription medication at the age of 12, quickly becoming addicted to pills. His addiction lasted for years, and getting clean was a struggle.

Now sober for two years, Dahl was driving around town when he noticed one of his own prescriptions in the car. Why don't they make pill bottles with locks on them, he wondered? A nursing student at St. Paul College with little business experience, he knew he needed to pursue his idea.

Dahl developed a special top for pill bottles that can be opened only through a combination lock. Called ProtectRx, the patent-pending mechanism is an adaptor that engages and disengages with the outside of the pill bottle, locking the lid into place on the adaptor.

It's a timely problem, with prescription drug abuse growing steadily in the United States. Opiate addiction—especially abusing them as prescription drugs—accounted for 33 percent of rehab admissions in 2009, up significantly from 8 percent a decade earlier, according to the U.S. Substance Abuse and Mental Health Services Administration.

"I've been going 100 miles per hour on this concept," says Dahl. "I want to take what I went through and make a difference to prevent young people or anyone from having that temptation of trying someone else's medication."

For a spring 2011 class project, they were tasked to develop a green energy idea for class.

The pair pored over magazine and journal articles, looking for inspiration.

After reading about their two technologies in separate articles, they decided to create a way to bring them together and take advantage of the greater power they

SEMIFINALISTS

- Ace Innovations—Jared Freudenberg
- Baysaan—Saïdo Mohamed
- Cognific—Solome Tibebe
- TextRA—Jessica Barros
- Toepener—Maxwell Arndt
- Scatja—Dick Anderson

generated.

"The idea just clicked," says Hudson. "We could provide these two technologies and make more power for the same amount of fuel consumed."

After the class project ended, Hudson and Schaupp continued developing the concept over the summer, creating their first prototype and proof of concept.

They conducted research, design, and testing to show that portable power generation is feasible with a device that is fuel-agnostic.

Next, the partners wrote a business plan and entered the Minnesota Cup.

Delving into the sales and marketing aspects of TesGen certainly was a challenge for the more engineering-focused students. But it's something they decided to pursue because they strongly believe in the potential of the product.

Despite the challenges, Schaupp and Hudson are glad they continued developing their generator and stuck with the Minnesota Cup competition.

It's been invaluable to learn how to communicate technical ideas to a lay audience, Hudson says, and the two also appreciate the exposure they gained to members of the business and venture capital community.

"We thought we had innovative technology, but the people in business and venture capital actually saw the potential of our product, too," says Schaupp, who is thinking about pursuing an entrepreneurial career.

"It was a beneficial learning experience for this company or another start-up—it's something I'll never forget."

number is expected to climb to 13 million by 2014, according to a study by Market Research Group.

Schaupp and Hudson are both seniors at Iron Range Engineering in Virginia, a joint program of Mesabi Range Community & Technical College, Itasca Community College, and Minnesota State University, Mankato.

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