Success Stories

An Update on Past Competitors, 2001-2015

From

The World’s Richest and Largest Business Plan Competition
RICE BUSINESS PLAN COMPETITION TEAMS HAVE RAISED OVER $1.8 BILLION IN CAPITAL & EXIT DOLLARS

Capital Funding Raised:

- 3 companies have each raised $100+ million; all three are still in business.
- 27 companies have raised $10+ million. 25 (93%) are in business or have successfully exited.
- 105 businesses have raised $1+ million. 90 (86%) are successful.

Of the 521 Teams Competing Since the RBPC’s Inception in 2001:

- 311 (60%) have launched.
- 163 (31%) are still in business.
- 181 (35%) are still in business or have exited successfully.
RBPC TEAMS HAVE RAISED $1.4+ BILLION IN CAPITAL FUNDING, $233+ MILLION, LAST YEAR ALONE

Of the 42 Teams Competing in 2014:

- 27 (64%) have launched.
- Collectively, the teams have raised $10+ million.
- 16 teams each raised $100+ thousand in the past 12 months.

The 88 Teams Competing in the RBPC Final Rounds:

- Have raised $552+ million (38%) of the total capital funding.
- Have a 53% success rate. 47 are still in business or made successful exits.
18 RBPC COMPETITORS HAVE EXITED SUCCESSFULLY, WITH AN ESTIMATED MARKET VALUATION OF OVER $386 MILLION

As the Rice Business Plan Competition grows and matures over the years, so too have the companies that participate. A growing number of RBPC alumni companies are making successful exits.

In the Past 9 Months:

BetaGlide
Indian Institute of Technology, Kharagpur, India | 2014 Competitor | http://retention.ai

In October 2015, BetaGlide was acquired by Inshorts, creator of a content distribution app. The acquisition amount was not disclosed.

Novira Therapeutics Inc.
Formerly Molecmo Nanobiotechnologies | Harvard University | 2007 Competitor | www.noviratherapeutics.com

Novira Therapeutics was acquired by Johnson & Johnson in December 2015. Johnson & Johnson is ranked number 37 on the FORTUNE 500 and is one of the fastest growing of big pharma companies.

SmarterShade Inc.
University of Notre Dame | 2011 Competitor | http://vgsmartglass.com

In July 2015, SmarterShade’s key human resources and assets were acquired by VG SmartGlass. VG SmartGlass was founded in 2014 as an entity specifically to commercialize the technology from SmarterShade Inc.

15 Previous Exits:

Auditude – 2005 RBPC Winner
Acquired by Adobe Systems in 2011 | University of California, Los Angeles | Finished 1st in the 2005 RBPC

ATDynamics – 2006 RBPC Winner
Formerly Advanced Transit Enterprises | Dartmouth College | 2006 Competitor

In February 2015, ATDynamics was acquired by Longview, Texas-based Stemco, maker of commercial vehicle wheel end, braking and suspension components. Stemco is a subsidiary of EnPro Industries, Inc. EnPro is a leader in products for use in critical applications by industries worldwide.
**Avanti Metal Company**
Acquired | Harvard Kennedy School | Finished 7th in the 2006 RBPC

**BlackLocus**
Acquired by The Home Depot in 2012 | Carnegie Mellon University | 2011 Competitor

**CamGaN**
Acquired by Plessey Semiconductors in 2012 | University of Cambridge | 2011 Competitor

**ClearCount Medical Solutions -- 2004 RBPC Winner**
Acquired in 2014 | Carnegie Mellon University | Grand Prize Winner of the 2004 RBPC

**EcoLight**
Sold in July 2013 | Dartmouth College | 2012 Competitor

**Incept BioSystems**
Acquired by ORIGIO (now CooperSurgical) in 2011 | University of Michigan | Finished 3rd in the 2005 RBPC

**Lumedyne Technologies Incorporated**
Acquired in 2015 | San Diego State University | 2007 Competitor

**Power2Switch**
Acquired by Choose Energy in 2013 | University of Chicago | 2010 Competitor

**PrepMe Corporation**

**SCAN**
Acquired by Snapchat in 2014 | Brigham Young University | 2011 Competitor

**Semprus BioSciences**
Acquired by Teleflex in 2012 | Massachusetts Institute of Technology | Finished 2nd in the 2007 RBPC

**Taxcient**
Merged with Alavara in 2010 | San Diego State University | Finished 5th in the 2004 RBPC

**WiPower, Inc.**
Acquired by Qualcomm in 2010 | Massachusetts Institute of Technology | 2007 Competitor
6S Medical LLC  
The University of Utah | 2015 Competitor  

6S is designing and developing a surgical tool to close intra-abdominal defects caused during laparoscopic procedures. Their device will improve accuracy, increase safety and be more cost effective than the current standard of care. The company recently filed a U.S. utility patent. They are headquartered in Sandy, Utah.

A-76 Technologies  
Rice University | 2014 Competitor | www.a76tech.com  

A-76 Technologies is a preservation coatings and lubricants manufacturing company, providing anti-corrosion solutions to a wide range of industries, including oil and gas, maritime, transportation and household applications. They developed a multipurpose product that acts as a preservation coating and lubricant and prevents corrosion in aggressive high salinity, high humidity environments on a wide range of metal surfaces including noble metals, nickel, copper, aluminum, magnesium and all grades of oil field steel.

The company currently offers three product lines. A-76 Super is a preservation coating and lubricant that provides corrosion prevention protection for unpainted metal surfaces and is ideal for oilfield, maritime, firearms and mechanical applications. Their second product, A-76 Green has 0 percent VOC emission and no volatile solvents, perfect for application in enclosed environments. Their third product is A-76 Electronics, an anti-corrosion coating specifically designed for electronics applications such as circuit boards and interconnects where less lubrication is desired.

Cofounder Lauren Thompson was recognized on Forbes 2015 “30 Under 30” list in energy. The second place winners at the 2014 RBPC raised a Series A round of funding and were featured in numerous local and national publications, including the Houston Business Journal, Fortune and Forbes. A-76 is headquartered in Houston.

Acera Surgical Inc.  
Washington University in St. Louis | 2014 Competitor | www.acerasurgical.com  

Acera Surgical Inc. is a medical device company producing a first-in-class line of implantable electrospun surgical materials and related tools and accessories. The company has designed Cerafix™, a surgical mesh engineered for use in the neurosurgical repair of dural defects. The team is working on additional mesh products for both hernia and orthopedic surgery.

Headquartered in St. Louis, Mo., Acera Surgical presented at the 2015 Texas Lifescience Venture Forum at Rice University.
Adhesys Medical  
Formerly Medical Adhesive Revolution GmbH | RWTH Aachen University, Germany | 2014 Competitor | www.adhesys-medical.com

Adhesys Medical seeks to change the game of wound closure, developing one-of-its kind polyurethane-based surgical adhesives. The technology is unique as it combines ease of use, strength, flexibility and biodegradability, allowing for wound-closure on and in the body within seconds. It is the team’s vision to bring their wound sealants into every emergency room, operating room, and soldier’s medical pack, to save lives, radically enhance surgical procedures and improve patient comfort.

Residents of the TMCx Accelerator at the Texas Medical Center, the company recently completed their human study for their topical product and finalized their commercial supply chain. They are planning to apply for their CE permit summer of 2016.

Now based in Houston, Adhesys Medical won the Rice Business Plan Competition in 2014.

Advano  
Tulane University | 2015 Competitor | www.advanotech.com

Founded in 2014, Advano is a nanoparticle manufacturing and processing company that will disrupt the way nanoparticles are currently made. The startup features an innovative four-in-one step nanoparticle manufacturing process that is rapid, simple, efficient and highly scalable. Their process produces high quality, functionalized nanoparticles that are more affordably made than those at the current market price.

Advano is currently developing silicon nanoparticle dispersions for global material manufacturers and battery anode manufacturers. They achieved pilot-scale (kilogram/hour) production with the ability to scale directly to commercial scale (ton/hour) production. Recently restructured into a C-corp, the company raised funds through both grants and angel investors. They are based in Metairie, La.

Aftton  
Formerly Detonation Dynamics | The University of Texas at Arlington | 2014 Competitor | www.afthon.com

Aftton aims to solve the problem of lack of access to grid-electricity across the developing world by providing consumers with a heat and power generator that is twice as efficient and at least five times as affordable as any competing product currently available. Their on-grid customers can slash energy bills by up to 25 percent, while their off-grid customers will have a sustainable source of resilient power.

Aftton was a MIT Clean Energy Prize semifinalist and was featured on Inc.com as one of the 50 Emerging Global Entrepreneurs to Watch. They received a grant from VentureWell and is part of the Clinton Global Initiative University.

Airzz  
Indiana University | 2015 Competitor | www.airzz.co

Airzz designs and produces a cutting edge, simple and smart air-cooling solution. Their product is as cheap and energy efficient as a home fan and enables cold airflow similar to a mobile air conditioner. Airzz is a cooling solution that will make air conditioning available to everyone, everywhere, in the world.
Ambiq Micro Inc.
University of Michigan | 2010 Competitor | www.ambiqmicro.com

Ambiq Micro provides ultra-low power integrated circuits for power-sensitive applications. Their patented Subthreshold Power Optimized Technology (SPOT™) platform dramatically reduces the amount of power consumed by semiconductors, making their integrated circuits an ideal solution for energy critical applications. This technology enables the ability to operate transistors at voltage levels that are far below what is considered “standard” by semiconductor industry standards.

Armed with a fresh round of funding and a new CEO, Ambiq launched its first major customer in the fourth quarter of 2015 and is planning to target new markets.

Ambiq Micro has been featured in GigaOm, Xconomy and EE Times. They were a finalist in the 2010 Rice Business Plan Competition and is based in Austin, Texas.

AMPY
Northwestern University | 2015 Competitor | www.getampy.com

AMPY developed and produced the world’s first wearable motion-charger. AMPY MOVE transforms the kinetic energy from your motion into battery power for your smartphone and wearables. It is a portable smartphone battery that charges as you move.

Available to order for $99, AMPY MOVE can be charged from your motion or from the wall. A fully charged AMPY MOVE provides up to 24 hours of extra smartphone battery life. It can be used in conjunction with a free app to track calories burned and power generated.

Chicago-based AMPY raised early funding through a Kickstarter campaign and closed on a seed round led by the Clean Energy Trust. They intend to use the funding to shrink their technology for use in wearables and to scale production.

Antenatal Screening Kit
Now part of Jhpiego | Johns Hopkins University | 2011 Competitor

Antenatal Screening Kit has developed an affordable diagnosis to screen pregnant women for readily treatable but potentially fatal conditions including preeclampsia, anemia and gestational diabetes. The self-screening kit will be used in developing countries where access to diagnostic techniques can be limited and expensive.

The developers won the 2013 Maternal Health Challenge sponsored by ABC News, the Lemelson Foundation and the Duke Global Health Institute. Following its public debut at NCIIA’s Open Minds 2011 showcase of student innovation, Antenatal Screening Kit was selected as a Popular Science Invention of the Year.

Antenatal Screening participated in the 2011 RBPC as a social venture. The technology is no longer being advanced by a business entity, but is being developed under the auspices of Jhpiego, an international nonprofit health organization affiliated with The Johns Hopkins University.
Aqdot
University of Cambridge, England | 2013 Competitor | www.aqdot.com

Aqdot is a specialist chemical company with a focus and expertise in intelligent encapsulation technology. Their proprietary technology and know-how enables valuable active products to be protected, delivered and chemically programmed to release where and when required.

Spun out of Cambridge University, Aqdot’s technology has the potential to be game-changing in a wide range of industries, including household products such as detergents, pharmaceuticals, oil and gas, agrochemicals, cosmetics, food, paint, fragrances and personal products. Identifying unmet needs in these sectors, Aqdot develops products that enable its customers to introduce novel and differentiated brands, reduce manufacturing costs and make a truly positive impact on the environment.

Featured in Chemical and Engineering News, The Engineer and Cambridge University Research News, Aqdot has three material transfer agreements signed with three first-tier companies. The company is based in Cambridge, England and is funded, in part, by the United Kingdom’s Royal Society of Chemistry.

Arctic Sand
Massachusetts Institute of Technology | 2011 Competitor | www.arcticSand.com

Arctic Sand is a fabless semiconductor company with a high-quality, high-volume and cost-effective supply chain. Its supply chain partners include TSMC and the world’s leading players in wafer production, test and packaging technology.

The company’s initial product roadmap is focused on power conversion for LED display back-lighting and microprocessors for mobile applications such as smartphones, tablets and ultrabooks. Its technology is highly flexible and will soon be applied to broader applications such as servers, storage and networking, and integrated within processors and ASICs.

To date, they have amassed 15 patents and completed their Series B funding round. The MIT spinout received the Best Venture Award at the National Renewable Energy Laboratory’s 24th Industry Growth Forum and was an of EE Times Silicon 60 – Hot Startups to Watch. The company was also a Northeast Regional Cleantech Open Winner. A graduate of the North Shore InnoVentures’ incubator, Arctic Sand is headquartered in Cambridge, Mass., with a second design center in Santa Clara, Calif.

Are You a Human
University of Michigan | 2011 Competitor | www.areyouahuman.com

Are You a Human is the curator of The Verified Human Whitelist™, which allows anyone using it to be certain they are addressing a verified human before they serve content, services or ads.

Instead of searching for bots, which evolve in a matter of days, Are You a Human finds and verifies humans by analyzing natural user behavior across hundreds of thousands of websites. After the company has consistently seen and verified a user as human, they’re added to the Whitelist™ and then re-verified over and over again each day. Bots can’t consistently look and act like real humans on every page, every day, so they’re never added to the list.

Are You a Human now analyzes natural interaction in any environment and helps more than a million websites validate their traffic. The company placed second at the 2011 Rice Business Plan Competition and has been featured in PC Magazine, VentureBeat, Rolling Stone, Forbes and on CBS News (Detroit). The Detroit, Mich., company counts automakers Chevrolet and Ford among its clients. They plan to use funds from their recent Series A to double their headcount.
ATDynamics
Formerly Advanced Transit Enterprises | Dartmouth College | 2006 Competitor | www.stemco.com

ATDynamics is the leading global supplier of semi-trailer, rear-drag trailer aerodynamics technology. The company is reducing the fuel consumption and associated greenhouse gas emissions of leading North American trucking fleets by 12 percent. Its TrailerTail® rear-drag aerodynamics technology will deliver over $20 billion in fuel savings to trucking companies and consumers over the next decade by streamlining the airflow at the back of two million long-haul semitrailers pulled on U.S. and international highways.

ATDynamics was named to the Inc. 500, Inc. magazine’s annual list of America’s fastest growing private companies in 2013. Based in Hayward, Calif., ATDynamics won first place at the 2006 Rice Business Plan Competition.

In 2015, ATDynamics was acquired by Stemco, maker of commercial vehicle wheel end, braking and suspension components. Stemco is a subsidiary of EnPro Industries, Inc. EnPro is a leader in sealing products, metal polymer and filament wound bearings, components and service for reciprocating compressors, diesel and dual-fuel engines and other engineered products for use in critical applications by industries worldwide.

Atterx BioTherapeutics
Formerly ConjuGon, Inc. | University of Wisconsin | 2002 Competitor | www.atterx.com

Atterx has developed two products to fight multidrug resistant, Gram-negative bacteria. Its first product, C-1205, utilizes bacterial interference technology to prevent catheter associated urinary tract infections. Atterx has an Investigational New Drug application on file with the Food and Drug Administration and is poised to enter Phase 1b clinical trials. Their other core technology consists of using the natural process of bacterial conjugation to treat infection. The product GN-4474 has been developed using this technology to target Gram-negative bacteria. It has been shown to be effective in animal infection models and an investigational new drug filing was expected in 2015.

Atterx performs most of its research and development operations at its corporate headquarters in Madison, Wis. Funded in part by equity financing and grants from the U.S. Department of Defense, it contracts with leading pharmaceutical, manufacturing, clinical research and regulatory experts nationwide to advance its products.

Auditude
The University of California, Los Angeles | 2005 Competitor

Auditude was the leading video advertising technology and monetization partner for premium content owners and distributors. They maximized the value of video content while decreasing operational cost and ensuring a positive advertising experience for consumers anywhere they view video. Auditude worked with marquee broadcast and professional content companies including Comcast, Major League Baseball and Fox News.

In 2011, Auditude spun out a social TV app business called IntoNow. Based on the SoundPrint platform, IntoNow gives users the ability to almost instantly recognize TV content and then helps them share and discuss those shows with friends, both within the product and through social networks such as Facebook and Twitter.

In November 2011, Auditude was acquired by Adobe Systems. Adobe is based in Palo Alto with offices in Chicago, Los Angeles, New York City and London.
Aura Biosciences
Massachusetts Institute of Technology | 2008 Competitor | www.aurabiosciences.com

Aura Biosciences is an innovation-driven company focused on the development of drugs using tumor-targeted pseudovirions. Pseudovirions are a novel approach that harnesses the power of synthetic biology and viral evolution. Aura has developed methods to manufacture these synthetic viral structures and combine them with multiple types of drugs creating a new generation of highly efficient targeted molecules. The technology has been discovered and patented in partnership with the National Cancer Institute.

In May 2015, the Food and Drug Administration granted Aura Biosciences orphan disease designation for their drug treating uveal melanoma, also referred to as ocular melanoma. Listed as one of the 25 Women-Run Startups to Watch, the company was selected as Technology Pioneer by the World Economic Forum. They were featured in a March 2015 article in The Wall Street Journal and were named a Top Technology Innovator of the Year in Time magazine. Aura’s headquarters are located in the biotech cluster of Cambridge, Mass.

Avanti Metal Company
Harvard Kennedy School | 2006 Competitor

Avanti Metal produced titanium to sell at one-tenth of the current price, using one-half of the current capital and with one-hundredth of the hazardous waste and pollution of other producers. This lightweight, white metal is used in aircraft, ships and spacecraft. Avanti’s technology is based on Sadoway processes developed by Dr. Donald Sadoway, a world-renowned expert in electrochemistry at the Massachusetts Institute of Technology. The small startup’s early capital was funded through a grant from the MIT Deshpande Center for Technological Innovation.

Avanti Metal Company was sold to an international company specializing in metal production.

Avello Bioenergy
Iowa State University of Science and Technology | 2009 Competitor | www.avellobioenergy.com

Using technology licensed from Iowa State University Research Foundation, Avello Bioenergy transforms conventional biomass fast pyrolysis products into low cost and profitable feedstock for renewable energy, soil, chemical and material applications. (Pyrolysis is the thermochemical decomposition of organic matter.) Compared to conventional pyrolysis oil, Avello’s products are less corrosive, more stable and easily upgraded.

One of Avello’s products is a bioasphalt® binder, made from wood-based, fractionated pyrolysis oil. The also produce Biofuel Oil, a stable, low carbon liquid fuel oil for direct fossil fuel replacement or blending; biochar, used as an additive to soil, as a renewable fuel or as a potential carbon sequestration agent; and chemical feedstock for specialty markets.

In 2015, Avello presented their Thermochemical Conversion Peer Review to the DOE’s Bioenergy Technologies Office. Avello has been featured in publications such as Biorefining Magazine, Biofuels Digest and Canadian Biomass Magazine. The company occupies laboratory space at the BioCentury Research Farm in central Iowa.
Avitus Orthopedics, Inc.
Formerly BOSS Medical | Johns Hopkins University | 2011 Competitor | www.avitusortho.com

Avitus Orthopedics Inc. is a medical device startup developing new orthopedic technologies. The company is developing a novel surgical device that will enable surgeons to use gold standard autologous bone graft material. Current bone graft solutions are suboptimal in terms of efficacy, safety and cost. Avitus aims to provide the optimal bone grafting solution in order to improve the lives of its patients worldwide.

In 2015, Avitus Orthopedics won the Technology Enhancement for Commercial Partnerships (TECP) Award from the National Science Foundation. The company was granted permission by the FDA to market their device the following October. They have been awarded additional grants from the National Science Foundation, the Johns Hopkins Technology Accelerator Fund, the Maryland Innovation Initiative, the Coulter Translational Partnership Award, the Maryland TEDCO University Development Technology Fund and the NCIIA.

Based in Baltimore, Md., Avitus Orthopedics was founded in 2011 by a group of biomedical engineers from The Johns Hopkins University Center for Bioengineering Innovation and Design and leading spinal surgeons from Hopkins Medical Institute.

Bazo’s Fresh Mexican Grill
Formerly Taco Tikka | The University of North Carolina at Chapel Hill | 2004 Competitor | www.bazosgrill.com

Bazo’s Fresh Mexican Grill serves fresh, high quality Baja-style Mexican fare in a fast and casual setting. Based in Louisville, Ky., the company currently operates four corporate locations with over $1 million in annual sales. Bazo’s Fresh Mexican Grill offers franchise opportunities throughout Kentucky and surrounding areas.

Bennu, LLC
Baruch College | 2010 Competitor | www.bennuworld.com

Bennu is the leader in green social media marketing. Their company was started in 2010 by a diverse group of social entrepreneurs who met while pursuing their MBAs in New York City. Having previously worked on groundbreaking sustainability projects, the team was united by a common passion: using business to tackle social and environmental problems.

Inspired by the disturbing amount of waste — particularly plastic bottles — being sent to landfills as trash, Bennu launched by developing recycled promotional products that prevent landfill dumping, save energy and serve practical consumer needs. At the same time, their goal was to educate people about the environmental, social and economic value of sustainability. Social media presented the ideal communication channel to engage a community who shared Bennu’s values and beliefs.

Bennu continues to evolve, expanding from promotional products to social media marketing services, including their rapidly growing Green Business Bureau sustainability analytics software. They have been featured in major press outlets including VentureBeat, Forbes, Fast Company and C-SPAN. Headquartered in New York, their clients range from multinational corporations to startups that embrace business sustainability as a competitive advantage.
BetaGlide/rention.ai
Indian Institute of Technology, Kharagpur, India | 2014 Competitor

BetaGlide created retention.ai, a mobile app testing platform. The platform allowed other app developers to gather real-time information about their systems usage and app behavior to improve stability and performance. Retention.ai’s testing platform tracks users’ uninstalls and events and can measure the marketing efficiency of acquisition channels.

With offices in Palo Alto and Bengaluru (Bangalore), India, BetaGlide was featured in major media blogs and channels in India, including The Times of India, The Economic Times, The Hindu, The Indian Express, The Financial Express, VC Circle and India Digital Review. NASSCOM recognized them as being in the top 8 percent of IT startups in India.

In 2015, BetaGlide was acquired by Inshorts, creator of a content distribution app. The acquisition amount was not disclosed.

Biogas & Electric LLC
University of California, Los Angeles | 2010 Competitor | www.biogasandelectric.com

Biogas & Electric is developing NOxRx®, an air pollution control device for stationary biogas engines. NOxRx® is a low cost solution to nitrogen oxide emissions from biogas engines operating at anaerobic digesters at wastewater treatment facilities and large concentrated animal feeding operations.

The biomass industry is under considerable pressure to reduce emissions such as NOX, a greenhouse gas that is 300 times more damaging to the atmosphere than CO2. In 2010, Biogas & Electric established proof of concept. This represented a significant achievement for the industry since competing NOX reduction technologies are expensive and have difficulty meeting the stringent regulations set forth by regional air quality boards.

Based in San Diego, Calif., Biogas & Electric is completing a beta installation at the Bakersfield Wastewater Treatment Plant and is preparing for its third installation at the Palm Springs Wastewater Treatment Plant.

BiologicsMD, LLC
University of Arkansas | 2010 Competitor | www.biologicsmd.com

Based in Fayetteville, Ark., BiologicsMD, Inc. is an early stage therapeutics company that focuses on novel technologies to actively build or restore bone and reverse conditions of hair loss.

The company has an exclusive license from the Board of Trustees of the University of Arkansas, the Ochsner Clinic Foundation, and the National University Corporation Kagawa University (Japan) to develop new biologics that involve the molecular fusion of parathyroid hormone (PTH) with a collagenase Collagen Binding Domain (CBD). Importantly, the CBD selectively binds to type I collagen, thus delivering PTH directly to the bone or the hair follicle, where it can be most effective in building new bone or stimulating hair growth. This CBD-derived targeting also provides for a long-acting therapeutic, thereby enabling single or infrequent dosing for chronic disorders.

Grand prize winner of the 2010 RBPC, Biologics added another patent to their growing IP estate in 2015. BiologicsMD™ is a VIC Technology Venture Development™ portfolio company.
**BioLum Sciences**  
Southern Methodist University | 2015 Competitor | www.biolumsciences.com

BioLum is developing a medical device used to help manage asthma, revolutionizing the way asthma is diagnosed and making the chronic illness easier to handle on a day-to-day basis. They use a smartphone-based imaging system that uses optical light-up probes to detect and quantify disease biomarkers found in exhaled breath condensate.

BioLum’s device will enable users to monitor their condition through a mobile health platform, which will indicate lung condition and lung function. The point-of-care, time lapse imaging system consists of a low cost, light-sealed imaging device that is used in conjunction with a smartphone. The chemiluminescent diagnostic platform allows portable, on-site patient testing that provides results in less than one minute.

Additionally, BioLum’s smartphone-integrated technology will be able to collect data about asthma patients, medication and treatment, regional data across the country and different asthma environments. This offers an opportunity to collect data on a chronic illness that affects a large percentage of the population that we have never had the ability to test.

Dallas-based BioLum’s device recently won the top prize at the Global Student Entrepreneur Awards, and the company was featured in D-healthcare Magazine.

**BlackLocus**  
Carnegie Mellon University | 2011 Competitor | www.blacklocus.com

BlackLocus developed a SaaS (software as a service) price optimization platform, offering powerful and affordable e-commerce competitive pricing analysis to customers ranging from small businesses to those on the Internet Retailer 500. Powered by collaboration with industry experts and human-computer interaction researchers, BlackLocus deployed sophisticated machine learning and revenue management techniques in a pricing-as-a-service model, enabling small and mid-sized online retailers to compete with larger and/or more established players.

BlackLocus was named Startup to Watch by Inc. in 2012, and the company was featured in publications including The Wall Street Journal, Tech Crunch and GigaOm. In 2012, BlackLocus was acquired by Home Depot, a mere 20 months after competing in the 2011 Rice Business Plan Competition. Black Locus has become The Home Depot’s Innovation Lab and remains in Austin, Texas.

**Blade Electronics**  
Formerly Bladepad | Brigham Young University | 2012 Competitor | www.blade-electronics.com

Blade Electronics develops cutting edge tech products with an emphasis on mobility and premium design. Their Bladepad, the world’s most mobile video game controller for iPhone, iPod Touch and iPad, brings a complete console-style controller to smart phones. With a convenient and comfortable gamepad, Bladepad maximizes portability and minimizes unnecessary bulk.

In addition to their original Bladepad, they have expanded their offerings to include the PulsePak and the Infinity Mouse. PulsePak is a tiny, external battery pack roughly the size of two and a half sticks of chewing gum, capable of providing even the largest phones up to two hours of additional talk time. The Infinity Mouse is a premium wireless mouse that enables you to keep working even after the battery dies. Simply plug it in to your computer as if it were a wired mouse, and you can continue using Infinity Mouse while its internal battery recharges—interruption free. You will never have to stop to remove the batteries, dig up your wall charger, and replacement batteries or switch to a wired mouse again.

Blade Electronics’ products can be purchased on Amazon, Shopify and Best Buy.
Blue Nano
Formerly Filigree Nanotech | Wake Forest University | 2008 Competitor | bluenanoinc.com

Blue Nano produces silver nanowires for the transparent conductor industry. The company’s process produces higher quantities of nanomaterials that are of higher qualities and at lower cost than current manufacturing methods.

They serve universities, independent research labs and original equipment manufacturers across the globe in a wide variety of sectors ranging from automotive to energy to health care. Applications for its nanomaterials include printed electronics (displays, photovoltaics, electrochemical and optical sensors), batteries, catalysts and antimicrobials. In particular, Blue Nano has placed an emphasis on cutting edge clean energy products for solar cells, lithium ion batteries and a variety of chemical and fuel cell catalysts.

Growing organically through sale of its materials, Blue Nano continues to add new customers, many of whom are Fortune 100 companies. It has also added Seika Corporation, a subsidiary of Mitsubishi Heavy Industry, as its distributor in Japan. The company is based in Charlotte, N.C.

Boom Algae
Formerly Superior Ecotech | University of Colorado, Boulder | 2014 Competitor | http://boomalgae.com

Boom Algae uses a unique combination of proprietary technologies to convert CO2 emissions into pure algae oils. These oils can then be used in consumer products like cosmetics and vegan omega-3 supplements. The company’s long-term goal is to use these early projects as a platform to develop a highly cost-effective method of algae production to serve as a significant source of renewable energy.

The company is currently in the design and building phase of the first ever, co-located algae culturing facility. The demonstration unit is being built on the roof of a local brewery in Boulder, Colo. The company has one patent on file awaiting action from the U.S. Patent and Trademark Office.

Boom Algae is in the midst of performing a year long sponsored research agreement for a partner company. The partner is funding the work in exchange for intellectual property. In addition to winning the Department of Energy Clean Energy Prize, the company received a grant from the Boulder Energy Challenge Grant program and first place in the University of Colorado, Denver Business Plan competition.

Boomalang
Vanderbilt University | 2015 Competitor | www.boomalang.co

Boomalang is an online language exchange platform. They connect native speakers from different cultures to improve conversational fluency through live video chat. With minimally guided conversation content relevant to the matched pair, Boomalang simulates a natural language learning experience.

Since competing in the RBPC, Boomalang earned their first revenue and extended user trials with six partner universities: three in the U.S. and three in Latin America. This summer, they will optimize for mobile, modify the product to be scalable for more users, and pilot with an international corporation.
Briteseed LLC
Northwestern University | 2013 Competitor | www.briteseed.com

Briteseed LLC is a Chicago-based medical device company developing SafeSnips™. SafeSnips is a forward-thinking technology that puts sense into surgical cutting tools. By integrating blood vessel detection technology with existing surgical cutting tools, SafeSnips can find vessels at risk of uncontrolled bleeding even where tactile feedback is unavailable. By utilizing near-infrared spectroscopy sensors integrated into the tips of cutting tools, such as energy devices, SafeSnips identify the presence and diameter of blood vessels in the immediate cutting area. Surgeons are alerted via video monitors currently used in the operating room.

Briteseed was born out of the 2011–2012 NUvention at Northwestern University. The company has been featured in the Chicago Tribune, Fortune, Tech Cocktail, Crain’s Chicago Business and the Chicago Sun-Times.

The Kaufman Foundation named Briteseed a Top 5 Entrepreneur. In addition, the company is a VentureWell grant recipient and received the MedTech Innovator award. Briteseed placed second in the 2013 Rice Business Plan Competition.

C3Nano, Inc.
Stanford University | 2010 Competitor | www.c3nano.com

C3nano develops solution-based, transparent conductive inks and films as direct replacements for indium tin oxide (ITO). The company works with prominent global and Asia-based companies serving the consumer electronics supply chain, including chemical companies, converters, coaters and device makers. C3Nano’s high performance materials seek to disrupt and capitalize on explosive growth in the touch-panel industry, thin-film PV and emerging technologies such as OLED lighting and smart windows.

In 2015, C3Nano acquired Aiden Co. The Korean company is a major supplier of silver nanowire, which will provide C3Nano with a steady supply for quick, at-scale production. The acquisition also builds C3Nano a direct bridge to the Asian display markets.

Founded in 2010 as a spinout from Stanford, C3Nano is a backed by leading venture capital firms and is headquartered in Hayward, Calif.

CalWave
University of California, Berkeley | calwave.org

CalWave provides a solution to harness the renewable power of ocean waves to produce electricity and freshwater. Our device is a novel Wave Energy Converter (WEC) called the WaveCarpet that is simple and scalable. Our innovative approach was inspired by the ability of a muddy seafloor to effectively absorb overpassing ocean waves within only a few wavelengths. The unique converter design uses a synthetic-seabed-carpet that has the ability to extract wave energy the same way. The WaveCarpet operates submerged, allowing it to survive stormy seas while causing no visual pollution or posing any collision danger.

The technology is based on research conducted at MIT and Berkeley. CalWave is currently part of the Cyclotron Road program at Lawrence Berkeley Laboratory.

CalWave was a MIT Clean Energy Prize semi-finalist in 2015 and recently qualified as one of the nine finalists vying for the DOE Wave Energy Prize. Forbes named CalWave’s project lead, Marcus Lehmann, to its 2016 “30 Under 30” list in energy.
CamGaN
University of Cambridge | 2011 Competitor

A spinout from the Department of Materials Science at the University of Cambridge, CamGaN developed low-cost, gallium nitride white LEDs (light-emitting diodes) for use on standard and readily available silicon substrates.

In 2012, CamGaN was acquired by Plessey, which manufactures semiconductor products used in sensing, measurement and control applications. The company will produce LEDs based on CamGaN’s proprietary GaN-on-silicon technology at its processing facility in Plymouth, England.

CaptainU
University of Chicago | 2009 Competitor | www.captainu.com

CaptainU is the leading provider of Web-based recruiting software for high school athletes seeking to compete on the university level. CaptainU users register to build a profile that includes the student athlete’s statistics, team affiliations, training camp attendances and GPA. The site also provides templates for tracking statistics and displaying highlight videos used by college coaches. It equips high school staff and administrators with the tools to help students navigate NCAA eligibility requirements.

The CaptainU website is used by more than two million high school athletes, college coaches, club coaches, and tournament directors. The company’s tools and videos, supported by its national network of professional cameramen, have helped athletes land spots on many of the best teams in the country, like UCLA, Michigan and Arizona State, and many of the best academic institutions in the country like Harvard, the University of Chicago and University of California, Berkeley.

CaptainU has never taken any outside capital. They are fully bootstrapped and profitable. The company has been featured in The New York Times, CNN, and Fox Business News. Working remotely since 2009, their team is mainly in Denver and San Francisco.

CEON Solutions Pvt. Ltd.
Indian Institute of Information Technology and Management, Gwalior | 2004 Competitor | ceon.in

CEON is the pioneer and leading provider of integrated education process management solutions and consultancy to educational institutions. CEON offers accurate real time information and knowledge management systems to parents, teachers, students and management.

Its flagship products, iSchool and iCampus, are aligned to meet the needs and budgets of diverse schools and colleges. iSchool believes that each child has potential and can be groomed to excellence. Their modules are designed to help educators and parents manage, analyze and assist in the multidimensional growth of students over the years. An extension of iSchool, iCampus provides automation software for colleges and universities across India.

CEON Solutions is currently operating across India and in three additional countries. Their software won five national open software contests at various IITs. CEON was named one of the hottest entrepreneur startups of India by Nen Technologies. Because of its success, they have been featured in the Indian national dailies such as the Times of India and The Business Standard. CEON maintains offices in Ahmedabad, Delhi and Patna, India.
Certo Labs Inc.
University of Toronto | 2007 Competitor | www.certolabs.com

Certo Labs Inc. is a Waterloo, Ontario-based biotech company providing kits that can extract nutrients or environmental toxins from food samples in one step. These extraction kits save time and money, compared to conventional techniques to analyze food.

Certo launched its first two products in 2014, followed by another two in 2015, all of which have been adopted for distribution by a global distributor. They have three more products in the pipeline.

Citrine Informatics
Formerly Big Science | Stanford University | 2013 Competitor | citrine.io

Citrine Informatics is a cloud data and analytics platform company. The company is dedicated to solving one of the greatest scientific and societal challenges of today: How to rapidly invent and manufacture novel materials with tailored properties.

Their platform ingests and analyzes vast quantities of technical data on materials, chemicals, and devices to streamline research and development, manufacturing and supply chain operations for any organization that produces a physical product. Citrine’s users are scientists and engineers at large manufacturing and materials companies, as well as researchers at universities and government labs, and their platform is an essential workflow tool that enables these users to analyze tremendous quantities of technical data.

Citrine recently partnered with the U.S. Department of Energy and others to develop new materials and devices for multicaloric refrigeration and, in November 2015, reached a milestone of 3 million data points. In January 2015, founder Greg Mulholland was recognized in Forbes “30 Under 30” list in energy. Citrine is based in Redwood City, Calif.

ClearCount Medical Solutions
Carnegie Mellon University | 2004 Competitor

Pittsburgh-based ClearCount Medical Solutions developed a radiofrequency identification (RFID) tracking system for the surgical operating room. They assembled an extendable RFID-based platform to improve efficiency while preventing medical errors. ClearCount’s SmartSponge and SmartWand-DTX systems are the only RFID-enabled systems for counting and detecting surgical sponges.

ClearCount’s technology was recognized by Popular Science as one of the top 100 innovations of 2009. It received both The Wall Street Journal Technology Innovation Award and the International Design Excellence Award. The company has received additional recognition from Time and WIRED magazines.

In late 2014, ClearCount was acquired. Details concerning the sale have been kept confidential.
**CommSense**

**Purdue University | 2014 Competitor | www.commsensellc.com**

CommSense is an early stage research and product development company targeting smartphone makers with ASIC solutions. They are developing a smartphone sensor that can detect how the phone is being used during operation, allowing better user interactivity, longer battery life, better signal strength and faster data rates.

CommSense’s “Adapt” sensing technology could enable a 25 to 70 percent increase in battery life with an added potential benefit of improved signal strength and higher data rates. Compared to other battery life improving solutions, Adapt is simpler, smaller and less expensive. Based in Lafayette, Ind., they have completed the development of their prototype.

**CoolComposites**

**Formerly CoolFlux | Massachusetts Institute of Technology | 2015 Competitor | www.coolcomposites.com**

CoolComposites is developing CoolFlux, a drop in additive for foam insulation that will improve its performance by up to 40 percent in warm environments, while increasing the cost to consumers by only 20 percent. A thermally reversible, inorganic, phase change material, CoolFlux absorbs heat during the day and releases it overnight, recharging itself for the next day.

In 2015, CoolComposites places second in the MIT Institute for Soldier Nanotechnology Soldier Design Competition for improving energy efficiency in U.S. Army barracks. The CoolFlux technology team also won the Infrastructure and Resources Track award at the MIT Clean Energy Prize.

**CorInnova, Inc.**

**Texas A&M University | 2005 Competitor | www.corinnova.com**

CorInnova is a preclinical stage medical device company that has developed a breakthrough technological platform for the treatment of heart failure. CardiacSTAR™, the flagship product under development, will be the first cardiac assist device in the market to promote heart recovery by enforcing correct cardiac motion. The device does not touch the blood, making it significantly safer than left ventricular assist devices, which have a high rate of stroke and bleeding.

CorInnova is targeting the multi billion dollar potential market for the treatment of congestive heart failure. They received seed funding and grants from the National Science Foundation and from the National Institutes of Health and hold four approved U.S. patents. Headquartered in Houston, CorInnova has successfully manufactured prototypes of the device and is pursuing first-in-human studies followed by regulatory approval in Europe.
CrowdTunes
Duke University | 2014 Competitor | www.crowdtunes.co

CrowdTunes is an interactive commercial music service that empowers patrons with the ability to affect the atmosphere by bidding on the music they want to hear. They provide a turnkey, legal music solution to venues that can be setup in less than five minutes. The company improves the establishment’s bottom line through increased sales to a more engaged customer.

The company is a combination of three separate products: background music, mobile jukebox and marketplace for music. The venue owner will be able to select a catered playlist from millions of songs that plays without interruption. Patrons will be able to choose and play new songs within the owners’ playlist. Songs will play in the order they were added, and during high volume periods, patrons engage in competitive bidding to move their songs to the top of the queue.

FORTUNE recently listed CrowdTunes as one of the five Tech Startups to Watch in Durham, N.C., and the company was a NC IDEA Winner in 2014.

CryoPop Project
Formerly MoMo Scientific | Now part of Jhpiego | Johns Hopkins University | 2012 Competitor | www.jhpiego.org

Momo Scientific developed a medical device to prevent cervical cancer. The patent-pending CryoPop uses dry ice to treat precancerous, cervical lesions in women living in developing countries. Routine tests such as pap smears are often financially out of reach for many women in the developing world. Dry ice, used to freeze cervical lesions, is readily available.

The technology was featured on National Public Radio, Medical Device & Diagnostic Industry Magazine and Medgadget.com. The device was named the Best Medical Device 2012 at the NCIIA BMEidea Competition. Since participating in the 2012 RICE BUSINESS PLAN COMPETITION as a social venture, the team developing the CryoPop has been within the innovations group of Jhpiego.

Jhpiego is a nongovernment organization affiliated with The Johns Hopkins University developing strategies to help countries care for themselves by training competent health care workers, strengthening health systems and improving delivery of care. Jhpiego will be looking to license the technology to a true medical device company.
cycleWood Solutions  
Formerly cycleWood Plastics | University of Arkansas | 2011 Competitor | www.cyclewood.com

Using their patented technology, cycleWood Solutions modifies lignin, an abundant, natural byproduct of the paper manufacturing process, and blends it with other compostable polymers to create our product, the Xylobag™. The bag breaks down into humus in approximately 180 days once it has reached the natural environment, improving soil structure and leaving a cleaner environment. The Xylobag™ provides retailers with a viable, cheap bag alternative and allows consumers to eliminate unsightly plastic litter from their communities.

Their Xylomer™ pellets are a proprietary blend of polymers and additives to produce a 100 percent biodegradable and compostable thermoplastic. To date, cycleWood has produced single-use plastic bags, trashcan liners, and meat bags on commercial blown extrusion lines. Additionally, they have used the Xylomer™ pellets in injection molding and vacuum forming processes to create samples of cups and bowls.

In 2016, the U.S. Patent Office awarded cycleWood Solutions a patent for chemical modification of lignin and its derivatives. The company received an SBIR, Phase II grant from the National Science Foundation in 2014 and press coverage by Harvard Business Review Today, Reuters, Fortune, and Ecopreneurist. They placed fourth in the 2011 Rice Business Plan Competition and won the bronze in the 2012 Edison Awards for the safety and sustainability category. Headquartered in Dallas, cycleWood has an additional office in Fayetteville, Ark.

Cytex Therapeutics  
Duke University | 2006 Competitor | cytextherapeutics.com

Cytex Therapeutics is developing bio-artificial devices to treat orthopaedic diseases. They design implants made from 3-D woven textiles engineered to generate cartilage that can be used to treat cartilage degeneration in the hip and knee. The foundational technology in development at Cytex Therapeutics combines medical textiles that have been highly engineered to provide the immediate functionality of cartilage with tissue engineering to promote long term native cartilage regeneration. Cytex’s bio-artificial cartilage mimics the mechanical and biological properties of natural cartilage while promoting a long-term healing response that regenerates native tissues.

Cytex has two products currently in preclinical in-vivo studies. Cytex has received SBIR grants through National Institutes of Health to study the effects of biochemical cross-linking and to study disease-modifying compounds. Additional funding and support has been provided by the North Carolina Biotechnology Center, the National Science Foundation, NC IDEA and by the Duke StartUp Challenge. Cytex is headquartered in Durham, NC.
D-Orbit
Santa Clara University | 2010 Competitor | www.deorbitaldevices.com

D-Orbit develops devices that enable the safe disposal of artificial satellites at the end of their life, removing them from their orbits. The device is installed on the satellite prior to launch. It provides a sustainable access to space, extends the satellite’s life and increases revenues for the end user. With D-Orbit, sustainability goes hand in hand with a better use of the satellite and generates higher revenues.

Space debris is a major threat to space activities and human safety. In the next few years, the probability of satellites failing due to collision with fragments will increase by almost three orders of magnitude. D-Orbit offers a reliable and cost-effective product for satellite owners and operators to avoid the economic consequences that come from satellites crashing into other spacecraft or damage to people and assets on Earth. Among other benefits, it helps contain insurance costs.

The company has previously received numerous awards and honors including the 2013 IAIR Award for innovation and leadership and the 2013 Red Herring Global 100. They have been featured in various articles and interviews in the primary Italian newspapers as well as WIRED, The Japan Times and Space Safety Magazine. Based in Lomazzo, Italy, the company has international offices in Los Angeles and Lisbon. Recipient of a fourth quarter 2015 funding round, they intend to use the funds to launch their product.

DaStrong Corp.
Formerly EcoBreeze | National Taiwan University, Taiwan | 2014 Competitor | www.dastrong.com

DaStrong Corp. stands to revolutionize the electronic cooling industry. They provide an electromagnetic force-driven, bearing-free, and oscillating blade-cooling module. By feeding the module with alternating electric signals, the actuator will generate interchanging electromagnetic forces that push the blades to vibrate at the designated frequency. The vibration will then deliver strong cooling airflow. Compared to competitors’ offerings, the DaStrong module has multiple competitive advantages, including lower cost, lower power consumption, higher reliability, higher adaptability and a longer life span.

DaStrong raised angel funding in August 2015 and won the investment prize of initial funding from the 43North Business Plan Competition. With their core patents granted in China, Taiwan and the United States, DaStrong is in business negotiations with multiple electronic companies. DaStrong offices in the Innovation Center of the Buffalo Niagara Medical Center and is part of START-UP NY.

Datafiniti
Formerly 80legs | Rice University | 2009 Competitor | www.datafiniti.co

Datafiniti provides instant access to web data. The company compiles and indexes product, business, and property data from the entire Internet, and using their proprietary technology, transforms it into a single database so businesses can access the web data they need.

Their exhaustive yet scalable data collection and quality control process provides customers with industry-leading coverage and accuracy. Datafiniti helps business take the next step in developing data-driven applications and conducting insightful market research. Headquartered in Austin, Texas, the company was a finalist at the 2009 Rice Business Plan Competition.
DATTUS
Formerly Bearing Analytics | Purdue University | 2013 Competitor | www.dattus.com

DATTUS provides a platform (hardware + software) to make industrial machinery “smarter” and helps industrial facilities compete in the rapidly evolving industrial environment through data-driven intelligent decision making. Their hardware gathers data on a wide range of parameters (e.g. temperature, vibration, cycle counts), and their software translates this data into actionable insights through packaged analytics algorithms. The turnkey platform solution provides a seamless path for industries to add “smart” to their operations — enabling value delivery across maintenance and reliability; operational efficiencies, process, and quality management; manufacturing yield and throughput; environmental health and safety, and in the case of machinery OEMs, also post-sale support and warranties. DATTUS’ customers include Faurecia and Wabash National.

As a national finalist at the 2013 Department of Energy Clean Energy Challenge, DATTUS was awarded grants from Founder.org and the Department of Energy through the Chicago-based Clean Energy Trust. The company receives additional support from the Purdue Foundry, an entrepreneurial hub based in the Burton D. Morgan Center for Entrepreneurship. They were finalists at the 2016 Clean Energy Challenge (Early Stage) and have been nominated for the 2016 MIRA Award for “Tech Product of the Year.” DATTUS was selected for the Gener8tor accelerator in Wisconsin.

DDMotion
Formerly Differential Dynamics Corporation | Columbia University | 2005 Competitor | www.ddmotion.com

Headquartered in suburban Baltimore, Md., DDMotion has invented the world’s first mechanical, infinitely variable motion controls. Their revolutionary technology’s core element is the patented three-variable Transgear™ gear assembly. The Transgear assembly provides the optimal gear ratio for all operating conditions, resulting in a cost efficient, environmentally friendly method of controlling machinery. The company holds an array of patents on its innovative variable motion controls.

DDMotion offers a breakthrough paradigm in the development of turbines used to produce electricity. Companies who use existing technologies are only able to incrementally improve on their efficiency and performance. Focusing on a new logic for motion control rather than enhancements to existing products, DDMotion offers its partners a competitive advantage that can help them increase energy production and position themselves as leaders in the industry. DDMotion is supported in part by the Maryland Industrial Partnerships Program and the Maryland Technology Development Corporation.

DexMat
Rice University | 2015 Competitor | dexmat.com

DexMat manufactures high performance products made from Carbon Nanotubes (CNTs) for a new generation of consumer and commercial applications. The company’s competitive advantage is their proprietary solution-processing technology, originally developed at Rice University by our founders. Their technology delivers fibers and films that are made of essentially pure CNTs, without the use of binders and additives. DexMat’s CNT fibers and films conduct electricity like metals; yet have the flexibility, lightweight and corrosion resistance qualities of polymers — the best of both worlds.

DexMat’s cost-effective process is scalable to large volume manufacturing. It can be used for cables and wires, textiles, sensors and medical devices, electronics and energy storage, and structural applications. Based in Houston, DexMat won fifth place in 2015 RBPC. In addition to their winnings at Rice, the company received an SBIR grant through the U.S. Air Force. They are now searching for a facility to start manufacturing on a commercial scale. Co-founders Dmitri Tsentalovich and Francesca Mirri were on Forbes’ 2016 list of “30 Under 30” in manufacturing and industry.
Diagenetix, Inc.  
University of Hawai’i | 2011 Competitor | diagenetix.com

Honolulu-based Diagenetix, Inc. develops portable and low-cost molecular diagnostic technologies. Improving upon the company’s original Smart-DART products, the BioRanger is a handheld biology lab, engineered to detect any gene marker. It is controlled by an Android app to facilitate record keeping and sharing of test results. The device is currently used by research communities across the globe, federal agencies, and agricultural producers and processors for on-site detection of microbial contamination and diseases.

In 2015, Diagenetix entered into a licensing agreement with Eiken Chemical. Media outlets such as The Wall Street Journal, TechCrunch, and AlleyWatch have covered Diagenetix. Its original DART platform was developed while the company’s founders attended the University of Hawai’i.

Digital Proctor (PULSE Analytics)  
The University of Texas at Austin | 2010 Competitor | pulseanalytics.io

PULSE by Digital Proctor monitors student performance, calculates the financial impact if they drop out and gives colleges access to an artificial intelligence retention counselor that automatically reaches out to struggling students. The company is based in Austin, Texas.

Disease Diagnostic Group, LLC  
Case Western Reserve University | 2013 Competitor | www.diseasediagnostic.com

Disease Diagnostic Group (DDG) is a medical device company specializing in the development of rapid, accurate, reusable, mechanical and inexpensive disease diagnostic tests. Its flagship product is RAM (Rapid Assessment of Malaria).

DDG was founded to create products that address the most pressing challenges in global health. These problems include not only better diagnosis of disease but also the communication of data throughout the health care system.

Disease Diagnostic Group is an Ohio for-profit social venture that was founded in 2012. Its mission is to create a paradigm shift in critical diagnostics from traditional tests to intuitive and sensitive devices. The diverse team of engineers, scientists, physicians, and global health experts is uniquely dedicated to making high-performance products specifically designed for resource-poor markets.

With offices in Cleveland, Ohio, and Boston, Mass., DDG is the recipient of numerous grants and awards including the Top 20 Medtech Breakthrough of 2014 and Think Magazine’s “30 Under 30.” In January 2016, they were semifinalists at SPIE Startup Challenge and winners of the second edition of the 2015 International Innovation Awards. They are currently competing in The Venture, Chivas Regal’s million dollar competition to promote social change on the global level. They have been featured in a number of media outlets including The Boston Globe, The New York Times and The Plain Dealer.
Driven Analytics, Inc.
University of Oklahoma | 2015 Competitor | www.driveninfo.com

Driven Analytics uses connected car technology to revolutionize the relationship between the car owner, car dealer and the automotive aftermarket.

Using the Vehicle Connect OBD2 dongle, Driven Analytics provides car owners with critical information about their vehicles through a mobile app called Maintain. Car owners can see when maintenance is due, get transparent pricing from their dealership and schedule an appointment right within the app. For car dealerships, the Vehicle Connect and the Maintain app allows them to reach customers in a more targeted way than ever before. Finally, within the app car owners can browse accessories specifically for their vehicle, connecting automotive aftermarket accessory suppliers with car owners segmented by year, make and model.

Driven Analytics closed a seed investment round in September 2015. Since closing on the round, they have hired five employees and are starting to test their product in local dealerships. In 2014, the company was named by CNBC as one of the 20 hottest start-ups in the world. The company is headquartered in Edmond, Okla.

Dynamics Inc.
Carnegie Mellon University | 2009 Competitor | www.dynamicsinc.com

Dynamics produces and manufactures intelligent powered payment cards and advanced payment platforms. Focused on introducing fast-cycle innovation to top card issuers, the company’s first commercial application is the world’s first fully card-programmable magnetic stripe for use in next-generation payment cards. Dynamics went on to produce the first fully card-programmable EMV and contactless technology.

The company has won many of the world’s most prestigious international business plan competitions including the Rice Business Plan Competition, Carnegie Mellon McGinnis Venture Competition, and the University of San Francisco Business Plan Competition.

The company won DEMOgod and the $1M People’s Choice Award at DEMO Fall 2010, Best of Show at FinovateFall (2010, 2011 and 2012), Best of Show at Cartes 2011, and Best of Show at BAI Retail Delivery 2011. Dynamics won Best in Show for Personal Electronics and Technology Honors at the 2012 International Consumer Electronics Show. Founded in 2007, Dynamics is headquartered in Pittsburgh, Penn.

Dynamo Micropower
Duke University | 2012 Competitor | www.dynamo-micropower.com

Based in Somerville Mass., Dynamo Micropower is a producer of small gas turbine engines. Dynamo sells engines, associated control systems and applications engineering to OEM partners that build reliable, fuel-flexible heat and power solutions. Dynamo Micropower gas turbine engines compete favorably with diesel engines in many applications.

After successful field trials, the company received a large order for its TurboCore engines from Multitek North America. Dynamo Micropower installed their first PowerCore electric generating turbine system in the fourth quarter of 2015 and anticipates the release of their 1.5 million BTU/hour TurboCore engine in 2016. Micropower is funded by an SBIR grant from the National Science Foundation and the U.S. Department of Energy.
RBPC Success Stories

EcoLight
Formerly Cirquility & House Inc | Dartmouth College | 2012 Competitor

EcoLight installed and managed energy efficient systems for residential and commercial businesses. In partnership with Dartmouth College, EcoLight installed energy efficient systems in the Thayer School of Engineering. After competing in the 2012 Rice Business Plan Competition as House Inc., the founders reorganized, first as Cirquility, then as EcoLight.

In April 2013, EcoLight’s founder sold the company. It is still operating under the same name in New Hampshire.

EEme
Carnegie Mellon University | 2013 Competitor | www.energyefficiency.me

EEme is an “analytics as a service” spin out from Carnegie Mellon University. The company converts raw smart meter data into appliance/equipment-level energy insights using proprietary machine-learning algorithms. This technology is a cost efficient alternative to installing expensive plug level hardware to monitor energy use or the time consuming physical building audits done by professionals.

Following initial pilots, the company released their largest of its kind, third party validation study with Pecan Street. The study encompassed 270 homes over 12 months and was covered by Greentech Media, generating significant interest in EEme’s technology in the U.S. and abroad.

They are currently continuing their deployments with a Texas-based energy retailer, a third party EE (energy efficiency) program evaluator, a smart meter technology vendor, a Denmark-based energy retailer, the U.S. Department of Defense and a Chinese demand response provider. EEme’s partnership pipeline consists of home energy management incumbents and smart meter technology vendors who would like to take their solutions to tens of millions of buildings.

Effortless Energy
The University of Chicago | 2013 Competitor | goeffortless.com

Effortless Energy makes custom smart home upgrades simple, affordable and accessible with web-based software and a proprietary financial model. They install cost-effective measures like insulation and air-sealing at no cost to homeowners, then recoup their investment by sharing in the energy bill savings with customers.

Effortless Energy connects the capital and energy efficiency markets. The company manages financing on behalf of institutional investors looking for stable, 6 to 8 percent returns and markets that financing, packaged with its audit and installation management services, to homeowners and property management companies.

Effortless Energy was a semifinalist at the U.S. Department of Energy’s 2013 MIT Clean Energy Competition. The company has been featured in Forbes, TheHuffingtonPost.com, the Chicago Tribune and VentureBeat.
EGG-energy
Formerly Sulico | London Business School | 2011 Competitor | egg-energy.com

EGG-energy delivers sustainable energy solutions to off-grid African households, building a last-mile distribution network for solar energy systems by efficiently managing local logistics, sales and marketing, consumer financing, and installation and maintenance.

EGG-energy’s mission is to improve its customers’ quality of life by engineering solutions and building distribution networks that connect their homes and businesses to affordable and reliable energy services. The company focuses on distribution and service, finding energy solutions that are suitable for customers now and, as technology evolves, consistently connecting the end user to the optimal energy solution. Its distribution network is specifically designed to enable multiple touch-points with our customers.

EGG-energy doesn’t just want to distribute a few solar lights in Tanzania — its mission is to scale solar home system distribution throughout Tanzania and East Africa. The company’s processes and systems can easily be replicated in other locations that have mobile money systems available. The team is working on forging a variety of partnerships with technology providers, financial institutions and larger-scale energy producers. While developing the distribution infrastructure is labor intensive, it is ultimately the most valuable and defendable part of the supply chain.

EGG-energy is supported in part by the U.S. Agency for International Development, GDF SUEZ, National Geographic and Power Africa, a U.S. government initiative to address the lack of access to electrical power in sub-Saharan Africa.

Elegus Technologies
University of Michigan, Ann Arbor | 2015 Competitor | www.elegustech.com

Elegus Technologies, a spinout from the University of Michigan, is commercializing battery separator technology that can enable safer, longer lasting batteries.

Their lithium-ion battery separator allows battery manufacturers to increase their energy density without compromising safety. With technology stemming from multiyear, multimillion dollar research at the University of Michigan, the separator is capable enough to solve the problems stemming from dendrite growth and thinness constraints.

During the summer of 2016, Elegus will be part of the inaugural class of TechStars Mobility Detroit.
Elevate K-12
Formerly Elevate Learning | University of Michigan | 2007 Competitor | www.elevatek12.com

Elevate K-12 offers intervention solutions to schools for all grade levels and all content areas. The company’s goal is for every student to get one-on-one, online instructional support, irrespective of geography, demography and ethnicity.

It works as a digital and virtual intervention school inside the school building. The school selects the academic goals and students to be targeted for the intervention. Elevate K-12 creates a customized online intervention course for the targeted students and assigns qualified online instructors to each student group. The instructors, their students and program implementation are digitally and virtually monitored. Analytics from these reviews periodically score improvement. Elevate K-12 runs and implements the program during or after school and on a set schedule.

Partnering with more than 5,000 instructors, Elevate K-12 has delivered over 5 million hours of instruction resulting in an average 35 percent increase in student’s test scores. The Chicago-based company is expanding nationally and globally.

Enlightened Diagnostics
University of Notre Dame | 2015 Competitor

Enlightened Diagnostics is a revolutionary cancer diagnostic company developing products that enable targeted, personal diagnoses from a three-dimensional platform. Currently, oncologists make diagnostic decisions based on two-dimensional cell histology. EnDx technology allows clinicians to make a more complete diagnosis based on a new three-dimensional tumor-viewing diagnostic system.

Connecting directly to pathology lab microscopes, the company’s hardware uses a laser that can be focused throughout the sample for a complete picture of the specimen.

Enlightened Diagnostics will concentrate their efforts on patent filing. They are based in South Bend, Ind.

essDOCS
Formerly Electronic Shipping Solutions and eShipping Solutions | University of Pennsylvania | 2004 Competitor | www.essdocs.com

Established in 2003, essDOCS provides electronic document services for international trade participants to better manage the documents required for operations, legal, compliance and customs purposes.

The company owns and operates the essDOCS eB/Ls (electronic bills of lading) exchange that guarantees instant delivery of legally effective, original, electronic trade and shipping documents. The documents offered include trading documents such as bills of lading, certificates of quality and cargo manifests; compliance documents such as safety data sheets; and customs documents such as electronic administrative documents. The essDOCS platform replaces the current paper flow, eliminating cost and risk.

In recent years, essDOCS’ network has grown significantly, serving 48 percent of the world’s tanker fleet. Their more than 3,300 customers are active in 71 nations. essDOCS’ customer base comprises leading oil companies, commodities traders, trade finance banks, ship operators, surveyors and shipping agents. It includes companies like Shell, Bank of America and Total. The company is headquartered in Valetta, Malta, with offices in London, Singapore, New York, Athens, Amsterdam and Taipei.
Essentium Materials
Formerly Natural Composites & Whole Tree | Baylor University | 2010 Competitor | essentiummaterials.com

Essentium Materials is building the next generation of essential materials. It bridges the gap from innovation to product by providing in-house research and development capabilities. The company offers consulting and contract research services, working with a variety of clients, from OEMs and Tier 1 suppliers, to medium and small businesses looking to expand their research capabilities.

Essentium’s currently available innovations are bio-based functional fillers for plastics and natural fiber composites. The company began with the coconut, a plentiful fruit crop with amazing natural composite properties; its natural fillers are a bioblend that includes coconut shell powder. The blend provides an engineered solution to create partially bio-based plastics, and fully bio-based when used with a bio-resin. Its coconut fiber composite is in production in the 2012 Ford Focus Electric with more innovations to come.

The College Station, Texas-based company is turning out automotive trunk liners, load floors (battery pack covers in electric cars) and living wall planters, among other things, with technology they developed that produces a composite material made of coconut husks combined with recycled plastics. Essentium’s work is supported by a grant from the National Science Foundation through its SBIR program.

EternoGen Aesthetics
University of Missouri | 2011 Competitor | www.eternogen.com

EternoGen Aesthetics is a clinical stage medical device company that has developed a transformative pipeline of first-class liquid collagen tissue products to restore lost dermal tissue.

The company’s platform Rapid Polymerizing Collagen (RPC) is easily injected in liquid form, on contact with tissue a natural collagen scaffold is formed immediately lifting wrinkled skin. RPC’s unique shielding technology inhibits degradation and in months dermal cells infill the scaffold forming natural tissue to support and reinforce the skin restoring youthful fullness, texture and elasticity.


FEED Resource Recovery Inc.
Babson College | 2007 Competitor | feedresource.com

FEED Resource Recovery Inc. provides the food industry cost-effective waste disposal solutions. It provides grocery stores and restaurants onsite waste conversion systems that produce renewable energy and organic fertilizer from their own food waste.

The company’s first completed project was a clean energy production system for Kroger. The Kroger system is designed and operated by FEED Resource Recovery and leverages Kroger’s existing distribution network to generate clean, sustainable power for onsite operations, reduce emissions and save millions of dollars on waste removal costs. The groundbreaking system is located at Kroger’s Compton, Calif., distribution facility.

The FEED system processes over 300,000 pounds of organic waste material every day, offsetting the Kroger distribution facility’s energy by over 20 percent. Additionally, the technology eliminates half a million miles of diesel truck miles annually and provides Kroger with a 18.5 percent return on investment.

Featured in the Los Angeles Times and Biocycle, FEED Resource Recovery is based in Boston, Mass.
Fluency Lighting Technologies
University of California, Santa Barbara | 2015 Competitor | www.fluencylighting.com

Fluency Lighting Technologies, Inc. is creating next generation, energy-efficient lighting technologies for high-power, high-brightness industrial light sources. Through materials design, they focus on improving energy efficiency, using environmentally safe materials, creating high color quality light resembling natural sunlight with color tunability based on application and lowering maintenance and replacement costs while creating a safer work environment reducing worksite accidents.

Fluency’s core technology lies within their patented laser-stimulated phosphor technology. Similar to low-power energy efficient light-emitting diodes, they instead use an alternative light source — a laser diode. Lasers are brighter, delivering more light using less energy. This approach allows for the creation of high-power solid-state lighting devices, enabling flexible design strategies and enhancing the availability of energy efficient light sources in the industrial lighting sector.

The company was founded based on innovations developed at UC Santa Barbara in energy-efficient illumination.

Fluid-Screen
Yale University | 2015 Competitor

A startup out of Yale University, Fluid-Screen has developed an inexpensive, portable electronic device to detect bacteria in water or blood. The quarter-size device uses nanosensors capable of detecting low concentrations of biomolecules or disease markers in less than half an hour. Automated and easy to operate, the device will potentially change the way people conduct water safety testing and detection of bacteria causing diseases.

Partnering with the New York-based advocacy group, Riverkeeper, the Fluid-Screen device will be tested on Hudson River water in the spring of 2016. A patent on the technology has been filed.

FocalCast
Marquette University | 2014 Competitor | focalcastapp.com

FocalCast is a cloud collaboration platform that turns any device into a live “Smartboard” for instant secure collaboration. Their mobile app allows users to turn slide presentations into interactive whiteboards from a smartphone or tablet. The app combines powerful wireless technology with intuitive software. It can be used as a teaching tool in the classroom or as a standard software solution for business, combing laptop, adapter, clicker and marker all in one app.

Alumni of the Capital Innovators Accelerator program, the company is based in St. Louis, Mo.
Fruitdee Co., Ltd.  
Formerly AGcerez | Chulalongkorn University, Thailand | 2013 Competitor | www.fruitdee.com

Fruitdee manufactures processed, organic longan. Longan is a fruit with a unique prebiotic component that aids in overall digestive health. The Bangkok-based company produces L’amai® prebiotic syrup, frozen pulp, juice, puree and golden dried longan from certified organic farms in the northern part of Thailand. Their supply chain embraces a zero discharge philosophy, leaving no waste in the environment.

They are currently developing longan seed extract, which has an equivalent or higher antioxidant property than Japanese green tea extract. Additionally, they achieved a new breakthrough in production methods, cutting costs almost in half.

GestVision, Inc.  
Yale University | 2014 Competitor | www.gestvision.com

GestVision is a startup company founded to make pregnancies safer, beginning with a point of care diagnostic for preeclampsia.

Since competing at Rice, the company licensed the technology and published the discovery in July 2014 edition of Science Translational Medicine. A recent USAID grant will make GestVision’s diagnostic available for testing in low resource communities such as Bangladesh and Mexico City. The company completed a clinical study at Ohio State University and is developing their diagnostic test for the United States.

Global Cell Solutions  
University of Virginia | 2004 Competitor | www.globalcellsolutions.com

Global Cell Solutions, headquartered in Charlottesville, Va., is focused on the application of a novel and dramatically improved patent-pending cell culturing technique. Global Cell is positioned to be an integral partner to the next generation of scientific breakthroughs in medicine, research, biotechnology, pharmaceuticals, and the emerging field of orthobiologics.

Partnering with the Medical Automation Research Center at the University of Virginia’s School of Medicine, GCS was awarded a STTR Phase I grant from the National Cancer Institute at the National Institutes of Health. This grant supports the R&D efforts for the development and production our microcarriers and automation platforms for various cell culture applications.

Global Cell technology is already establishing itself as an indispensable tool for improving research efficiency through higher cell quality and production by employing the latest in three-dimensional biology paradigms. They are currently in discussions with industry partners concerning potential licensing of their cell culture solution as well as collaborative research agreements.
Hemova Medical
Johns Hopkins University | 2011 Competitor | hemovamedical.com

Hemova Medical is a medical device company focusing on the needs of the renal community, pushing forward on tomorrow’s technologies, which will change the landscape of dialysis treatment and management. Their specific areas of focus are on vascular access creation, monitoring and surveillance, and patient engagement.

In the last year, the company completed work on the vein interface of the device. They continue to develop the port interface, which is the superficial device used by the technician and are still trying to establish acceptable long-term durability.

Hicor Technologies
Formerly OsComp Systems, Inc. | Harvard University and Massachusetts Institute of Technology | 2010 Competitor | www.hicor.com

In 2013, OsComp Systems Inc. spun off its virtual pipeline business and rebranded in 2014 as Hicor Technologies. Hicor is commercializing a novel rotary multiphase compression technology that enables producers to simplify their wellhead footprint, reduce their field energy consumption, increase the production lifetime of their wells and comply with the highest environmental standards by eliminating well site emissions. The Hicor technology achieves a more efficient compression process by minimizing the temperature rise associated with compression. Hicor’s technology is 30 percent or more efficient than conventional compressors.

Funded by top-tier investors Energy Ventures and Chevron Technology Ventures, Hicor operates a world-class facility with generous lab space to develop its technology, grow its ideas, and build and test its compressors. The company’s headquarters and test facilities are located in the World Houston International Business Center.

OsComp Holdings LLC provides a unique end-to-end transportation solution for transporting natural gas with its virtual pipeline system, making it easy for customers to switch to natural gas as a primary energy source. OsComp has two facilities located in Houston and Boston. Founder Pedro Santos was named to Forbes’ inaugural list of “30 Under 30” in energy in 2011 and has been the recipient of numerous technical awards including the Goradia Innovation Prize.
Husk Power Systems  
University of Virginia | 2008 Competitor | www.huskpowersystems.com

Husk Power Systems (HPS) provides locally based (decentralized), low-cost mini-power plants and distribution solutions to electrify rural villages. The first HPS plant was established as an experiment in August 2007 in Tamkuha Village in Bihar, India. The plant lit up Tamkuha, which means “fog of darkness,” for the first time in its history. HPS was formally incorporated in 2008 and is based in Patna, India.

HPS uses a biomass gasification based proprietary electricity generation process, where it converts biomass waste such as rice husks into gas that powers a turbine to generate electricity. They distribute electricity directly to rural households and small businesses.

Since 2008, HPS has successfully installed more than 80 mini-power plants, providing electricity to over 200,000 people spread across 300 villages and employing 350 people operating across the state of Bihar. Each plant serves around 400 households, saving approximately 42,000 liters of kerosene and 18,000 liters of diesel per year, significantly reducing indoor air pollution and improving health conditions in rural areas. By extending village life beyond daylight hours, HPS promotes economic development by enabling businesses to stay open after dark and allowing children to study at night.

Husk has received funding from venture capital groups and from the International Finance Corporation, the private investment arm of the World Bank. The company won the 2011 Africa Enterprise Challenge Fund Award and the Ashden Award for Sustainable Energy. HPS continues to receive a great deal of positive attention from the media and has been featured in publications including The New York Times, the Daily Beast and, most recently, the Voice of America, The Washington Post and PBS News Hour.

Hybridtronics  
University of Chicago | 2007 Competitor | www.hybridtronics.com

Hybridtronics is a Chicago-based commercializing hybrid electric technology for retrofitting Indian buses and trucks. In addition to complete hybrid electric systems, the company offers hybrid components that can be incorporated in existing hybrid electric or pure electric programs.

Its rugged, high speed, alternating current (AC) traction motors are the best in their class. They provide high and almost constant torque at high speeds. Hybridtronics has a specially configured AC traction drive that is configured to work with its motor.

The company also offers fully assembled battery packs with battery management systems (BMS) that can simply plugged into a vehicle. The hardware-based BMS will ensure that all the batteries stay balanced and are not over charged. Currently, Hybridtronics has designed this to work only on lead acid batteries, but as the company moves forward, it will provide BMS for Li-ion batteries as well. Hybridtronics operates in New Delhi, India.
Hylion
Carnegie Mellon University | 2015 Competitor | www.hylion.com

Hylion is developing an add-on hybrid system for the long-haul trucking market. Their product will reduce semi trailers total fuel consumption by over 30 percent. In addition, it will improve the driver’s quality of life as well as reduce harmful greenhouse gas emissions.

The biggest pain point in the trucking industry is fuel consumption, with nearly 40 percent of operating costs going toward fuel alone. Hylion’s SMART Suspension System uses regenerative braking to capture power when the vehicle is slowing down or going down hill and reuses it to accelerate. It adds power and technology to the trailer, which is traditionally a passive system and allows the Hylion team to tackle multiple other issues in the trucking industry with the same great product. They can give power to the truck while it is parked in a rest area so that the driver can turn his diesel motor off, save over 13 percent in fuel and finally get a good night sleep. Their system will also offer stability control, reducing the number of accidents caused by the jack-knifing and rollovers by over 50 percent. Lastly, Hylion gathers data while the vehicle is driving down the road and offers their customers see the information through an easy-to-use, web-based platform.


Illusense Inc
Formely AME | The University of British Columbia, Canada | 2013 Competitor | illusense.com

Illusense is developing a high accuracy leak detection and prevention solution to mitigate environmental damage and heavy costs caused by oil pipeline leaks.

Illusense is developing an ultra-high resolution laser-based internal oil and gas pipeline inspection technology to enhance integrity management by proactively prioritizing pipeline maintenance actions. The resulting 3-D data sets will allow pipeline operators to capitalize on unprecedented intelligence to enhance the understanding of the condition of their assets and deliver on their zero-leak goals. The company is headquartered in Richmond, British Columbia, and recently appointed a new executive chairman.

Ilumi solutions
Formerly ilumi Lighting Solutions | The University of Texas at Dallas | 2011 Competitor | ilumi.co

Ilumi solutions provides intelligent, simple, and innovative wirelessly controlled light-emitting diode (LED) lighting solutions. At the convergence of mobility and LED lighting technology, the ilumi Smartbulb is a color-tunable LED light you can control and program wirelessly using Bluetooth low-energy. Using the free app, you can adjust the color and brightness of your lighting or explore amazing built-in programs to experience lighting like never before. Plus, ilumi lasts up to 20 years and is five times more energy efficient than a regular bulb.

In 2013, the ilumi team turned to the crowdfunding platforms Indiegogo and Kickstarter, and in the spring of 2014, they took their Smartbulbs to ABC’s Shark Tank, which resulted in funding by Mark Cuban. This year’s Consumer Electronics Show in Las Vegas was a busy one for ilumi. They introduced an outdoor bulb and won the 2016 CES Bluetooth (Breakthrough Product Winner) Award. ilumi’s patent-protected wireless lighting control system has been featured in TechCrunch, CNET, Forbes, and in a business section cover story in the Dallas Morning News. Ilumi is based in Dallas.
ImagineOptix

The University of North Carolina at Chapel Hill | 2007 Competitor | www.imagineoptix.com

ImagineOptix creates innovative solutions for optical and opto-electronics challenges in displays, telecommunications, imaging, optical storage, spectroscopy and many other applications. In collaboration with organizations across a wide range of industries, ImagineOptix applies proprietary technologies to control and capitalize on the properties of light in unexpected ways, resulting in dramatic improvements to optical efficiency and performance.

Its patented thin-film wavefront and spectrum control technologies have been successfully applied to imaging systems, telecom switches, liquid crystal displays, and have enabled the world’s smallest, most battery-efficient projectors.

Since signing its first major development contract in 2012, the company has grown rapidly and now counts many of the FORTUNE 500 among its customers. With their impressive array of almost 60 patents and pending patent applications, ImagineOptix is one of North Carolina State University’s Fast 15 startups. Founded in 2004, ImagineOptix is headquartered in Cary, N.C. The company placed fourth in the 2007 Rice Business Plan Competition.

Immersed Games

University of Florida | 2015 Competitor | immersedgames.com

Based in Gainsville, Fla., Immersed Games is creating a video game as a platform for deep, empowering learning experiences.

After raising an angel round of funding last summer, they launched their first educational video game, Tyto Ecology, in January 2016. Gamers absorb information about life sciences while building in-game ecosystems. Although the app is free, revenue is earned when users buy add-ons and expanded versions of the game.

Impel NeuroPharma

University of Washington | 2009 Competitor | www.impelneuropharma.com

Impel NeuroPharma enables drugs to bypass the blood brain barrier. Their innovations have materialized into a rapidly growing medical device company that has attracted seasoned professionals committed to developing a robust technology platform for nose-to-brain drug delivery.

Impel’s patent-protected precision olfactory delivery devices deliver drugs to the upper nasal cavity for direct transport through the nose-to-brain pathway. This region is the only part of the body where primary brain neurons are exposed to the outside environment. In addition to pioneering technical achievements, Impel’s comprehensive approach to design also considers patient comfort, regulatory approval pathways and cost effectiveness. Collectively, these innovations accelerate the realization of new drug therapies for the treatment of many central nervous system diseases.

They have recently signed a licensing agreement with the Centre for Addiction and Mental Health (CAMH) and are in clinical state programs for Alzheimer’s, migraine, and pain management. Based in Seattle, Wash., Impel NeuroPharma has secured funding from top pharmaceutical companies, the U.S. Department of Defense, Washington’s Life Sciences Discovery Fund, the National Institutes of Health and the Wings medical device network.
Innovate
Babson College | 2005 Competitor | www.innovate.com

Innovate is developing and commercializing a new category of protein screening technology for clinical diagnostics and therapeutics. Innovate’s first product, a high performance protein microarray surface has since been combined with unique screening and analysis methods to create the Bio-ID. The Bio-ID is a holistic solution to protein screening with applications in protein research, drug development, quality control, biomarker profiling, biomarker validation and clinical diagnostics.

Innovates’ nanoscale, surface fabrication technology was developed at the Nanoscale Physics Research Laboratory at the University of Birmingham in the United Kingdom. Innovate owns an exclusive license on patents issued in the United States, the European Union and Japan for its nanostructured, substrate-manufacturing system. It has filed comprehensive patent applications on the core technology underpinning the Bio-ID. The company also owns exclusive licenses to patent filings covering protein biomarkers for the clinical diagnosis of prostate and ovarian cancer.

The company has been awarded government grants through the National Institute of Cancer and the United Kingdom’s Technology Strategy Board, and they have been accepted into prestigious loan programs through the North Carolina Biotechnology Center. They maintain collaborations and strategic partnerships with Harvard Medical School, Brigham & Women’s Hospital, Dana Faber Cancer Institute, Thermo Fisher Scientific, the University of Birmingham, Johnston Matthey and Teer Coatings.

Recently, Innovate successfully completed testing and benchmarking the first platform to integrate LAS: The Bio-ID 400. Additionally, they announced a financing round that will fund the commercial launch of the Bio-ID. Innovate continues to build an operational infrastructure to facilitate product development and the growth of commercial relationships. Founded in 2005, Innovate has offices in Birmingham, England, and in the Research Triangle Park, N.C.

Incept BioSystems
University of Michigan | 2005 Competitor

Incept BioSystems developed innovative, microscale technologies to provide fertility specialists with breakthrough capabilities. Its technology improved in vitro manipulation, performance and viability of high value cells.

Like many specialized cells, human embryos typically behave much differently while in vitro than they would in the body, and this performance gap can limit their developmental growth and potentially their viability. Incept’s System for Microfluidic Assisted Reproductive Technology (SMART) platform was the first to deliver unique control of in vitro cell culture environments so that fertility specialists can offer patients new hope in starting a family.

In 2011, Incept BioSystems was acquired by ORIGIO, a Danish company specializing in assisted reproductive technologies. In turn, ORIGIO was purchased by CooperSurgical. Market launch of Incept’s SMART technology is expected in 2016.
InContext Solutions, LLC  
University of Chicago | 2009 Competitor | www.incontextsolutions.com

InContext Solutions is an award-winning technology and market research firm specializing in online 3D environment simulations for virtual store research, collaborative store planning and e-commerce. Its research delivers highly accurate behavioral and attitudinal insights into shopper behavior. The company’s collaborative software tools allow companies and partners to make more effective product and store planning, environment design and promotional business decisions.

In March of 2015, InContext introduced its ShopperMX™ Connect, the world’s first web-based DIY software, enabling manufacturers and retailers to create and manipulate 3D simulations of retail environments.

Among its numerous awards and accolades, InContext was named one of America’s most promising companies by Forbes.com. InContext Solutions rang the opening bell at NASDAQ and was featured on the Today Show, CNBC’s Inside Business Report, Fortune, the Chicago Sun-Times and Crain’s Chicago Business. Clients include Coca-Cola, Johnson & Johnson and General Mills. Headquartered in Chicago, InContext Solutions also maintains offices in Minneapolis, London, and New York.

Innoblative  
Northwestern University | 2014 Competitor | www.innoblative.com

Innoblative is developing products to innovate and improve the way surgeons and interventionalists ablate surgical margins post excision. The company’s first product is a radiofrequency ablation applicator that allows surgeons and interventionalists to effectively coagulate and ablate soft tissue beds intra-operatively.

Since earning 4th place at the Rice Business Plan Competition in 2014, the company received a VentureWell grant, winning first place at the Biomedical Engineering Innovations, Design, and Entrepreneurship Awards hosted by the National Collegiate Inventors and Innovators Alliance (now VentureWell). In addition, the team was able to ring the NASDAQ closing bell by winning the University of Texas Global Venture Labs Competition. Named one of the 15 Chicago Startups to Watch in 2015, Innoblative has been featured in Fortune, CNN Money, the Chicago Tribune and Tech Cocktail.

Innoblative took first place at the 2016 M2D2 New Venture Competition. They partnered with Insight Product Development to build the pre-clinical prototype to test in an animal model and plans on submitting a Small Business Technology Transfer Phase I grant to the National Institutes of Health in the near future. They are based in Chicago.

Innsystec  
RWTH Aachen University, Germany | 2015 Competitor | innsystec.com

Innsystec (in the course of incorporation) is a spinoff of RWTH Aachen University focusing its activities on high performance wireless data transmission. The company is developing a new type of transmitter for various standards such as wifi, 4G or 5G.

The company is still in the development phase. They have one key filed and have received their first customer reviews.
**Inscope Medical Solutions**  
*University of Louisville | 2015 Competitor | inscopemedical.com*

Inscope Medical Solutions has developed an innovative technology that optimizes intubation, improving this high-risk procedure’s efficiency, speed and safety — saving lives and lowering costs to health care providers. The OneScope is a patent-pending wireless-enabled laryngoscope that integrates several devices into one.

Since competing at Rice, they have filed three new patent applications and have developed fully function prototypes of their first device that look and feel like the final device will. The company expects to be in market by fall 2016.

In November, Inscope Medical Solutions received the Vogt Award, a highly competitive grant award for manufacturing companies in Louisville. Named one of Louisville’s 2015 Hot Dozen companies, they were recently accepted into the Techstars Cedar-Sinai Healthcare Accelerator and will be attending this spring. Inscope won second place at the 2015 RPBC.

**Intellidemia**  
*Rensselaer Polytechnic Institute | 2009 Competitor | www.intellidemia.com*

Intellidemia develops a syllabus content management platform for higher education. It works with schools to streamline workflow and enhance collaboration with smart solutions that address accreditation, compliance and retention.

As the experts in syllabus management, Intellidemia supports higher education with Concourse, an easy-to-use platform that improves student performance, faculty productivity and administrative efficiency. Originally a concept conceived in a marketing class, Concourse has transformed into the world’s first commercial syllabus system. It enables syllabi to be put online fast, making it easy to organize, share and analyze course information.

Their clients include Webster University, Oregon Health and Science University, and Australian National University, and the company has recently hired their first sales person. Founded by two MBA students at Rensselaer Polytechnic Institute in 2007, Intellidemia is headquartered in Troy, New York.

**Inviroment LLC**  
*Brigham Young University | 2013 Competitor | inviromentllc.com*

Inviroment is developing an ecofriendly chemical solution that will degrade all classes of plastic within one to three years. The solution, PlasTek™ is made from safe, natural compounds. It is environmentally friendly; it won’t hurt animals, create harmful toxins or damage landfill liners or equipment. PlasTek will accelerate plastic degradation, which means these plastics will release methane, however, PlasTek will only be used by landfills that collect methane for energy. With PlasTek, the average landfill will produce enough additional energy to power more than 4,000 homes.

Inviroment has filed for a full, nonprovisional patent. Its laboratory tests are demonstrating strong progress. Based in Provo, Utah, the company has been recognized by ABC News, Plastic News and the U.S. Department of Energy.
IOWA Approach, Inc.
The University of Iowa | 2014 Competitor | iowaapproach.com

IOWA Approach has one focus: to develop and commercialize a simple to use and cost-effective ablation therapy for the treatment of atrial fibrillation. There are three key aspects to IOWA Approach’s ablation technique: simple access to the outside of the heart, one lesion to isolate all the pulmonary veins using a loop catheter and a safe yet powerful energy source that rapidly makes continuous, transmural lesions.

IOWA Approach is supported by Boston Scientific Corporation. New funding will help advance product engineering and other preclinical activities for patent-pending atrial fibrillation ablation technology.

iShoe Inc.
Harvard University | 2009 Competitor | www.ishoebalance.com

iShoe Inc. is an early stage, consumer health company, commercializing NASA technology originally used on astronauts upon return from space flight. They produce the En Point, a scale that identifies deteriorating balance; the scale is for both residential and clinical use.

iShoe holds two issued patents on proprietary technology to deliver the first all encompassing human balance biometric. Recently, the company has been featured in Xconomy, the TMC News, Houston Public Media and the Houston Chronicle. They are part of the Texas Medical Center’s TMCx Accelerator’s inaugural class.

Kegg Apps
Drexel University | 2015 Competitor | www.kegg.co

Kegg was built to provide students with a fun, social, secure and private environment to post their college event. When the team first started college, they quickly realized how difficult it was to find something going on around campus. Half the night was wasted wandering around campus, checking Facebook groups and texting anyone who could help us find something to do.

With Kegg, the frustration all students feel is instantly eliminated. Their private network is only for students and gets updated in real-time.

KiLife Tech
Brigham Young University | 2015 Competitor | www.kiband.com

KiLife Tech is bringing back the childhood freedom to explore the world people used to enjoy. They have created the most advanced child proximity wearable on the market for toddlers and young kids: A wearable device available today. The Kiband works with parent’s smartphones to empower children to safely explore the world around them while keeping them from getting too far away.

They were mentioned as one of the most innovative companies in Consumer Technology Association 2016 Annual Innovation Report. With a patent pending, KiLife was the grand prize winner at the 2015 Rice Business Plan Competition. The company is based in Orem, Utah.
Klymit
Formerly Argon Technologies | Brigham Young University | 2008 Competitor | www.klymit.com

Klymit is a noble gas technology company based in Ogden, Utah. The company develops and licenses variable insulation technologies. The gases used by Klymit are inert, meaning they are nontoxic, nonflammable and completely safe for both the user and the environment.

Klymit’s system uses flexible, airtight chambers filled with argon gas instead of down or other fiber insulations. NobleTek insulation is thinner, warmer and lighter weight than fiber insulators. Klymit markets its technology through its camping pads, sleeping bags and rafts. The company’s products can be found at outdoor gear stores throughout the United States and Canada or online. Their newest product is a daypack.

After winning numerous awards and notice from the likes of Business Week, Popular Science and Gear Junkie, the company reportedly sold the apparel side of its business in 2013. The spin off is Reno-based nudown.

KnowCharge Inc.
University of New Brunswick | 2010 Competitor | www.knowcharge.com

KnowCharge is a paper technology company based in Fredericton, New Brunswick, Canada. The company’s patented technology brings together market-leading static protection with sustainability, providing electronics manufacturers and component distributors with a new electrostatic discharge (ESD) packaging solution that not only protects sensitive electronics but lowers cost.

Knowcharge’s packaging products consists of ESD paper boxes, ESD paper void fill, and ESD moisture or shielding paper bags. The company’s ESD products lower costs by decreasing the labor, overhead, and disposal costs associated with non-recyclable foams and plastic packaging during the electronic manufacturing process.

As part of its global product launch in 2012, KnowCharge introduced the first patent-pending ESD moisture paper bag and ESD shielding paper bag at the electronica trade show in Germany. To support the international launch, the company established production and distribution partnerships in both North America and Asia.

In 2013, KnowCharge Inc. was recognized by the New Brunswick legislature for its world leading commercial technology.

Lark Technologies, Inc.
Massachusetts Institute of Technology | 2010 Competitor | www.lark.com

Founded in 2010, Lark Technologies is a consumer electronics company that makes wearable wellness monitors for sleep, exercise and diet. Its products include larklife, lark and lark pro. The company takes a holistic approach to developing its products that includes innovative hardware, intuitive software and expert-backed content.

Lucelo Technologies
The University of Texas at Austin | 2015 Competitor | www.lucelotech.com

Lucelo Technologies is a technology spinout from the University of Texas at Austin Mcketta Department of Chemical Engineering. They are working to develop a sustainable permanent power source to enhance wireless connectivity and data acquisition from remote and mobile devices.

The company is developing a simple method to fabricate photovoltaic devices using ambient processing conditions and roll-to-roll print techniques. Their core technology enables device fabrication on everyday materials, such as flexible plastic and paper, to produce a low-cost, non-intrusive, off-grid source of flexible, lightweight power. Lucelo’s technology will enable integration of electric power in places it’s never been before. Forbes named co-founder and CEO Aaron Chockla to their 2015 list of “30 Under 30” in energy.

Lumedyne Technologies
Formerly Omega Sensors | San Diego State University | 2007 Competitor

Lumedyne Technologies specialized in next generation, micro-electrical-mechanical systems (MEMS)-based displacement sensors for a variety of markets.

The first major accomplishment for Lumedyne was when it successfully raised its first round of funding as a combination of private investors and a grant from the Department of Energy to commercialize its technology for oil and gas exploration. Lumedyne then formed its first strategic partnership with one of the leading equipment providers for seismic imaging.

The company won much recognition throughout its history, winning awards for leadership (Lumedyne’s CEO was selected as a regional finalist for the Ernst & Young “Entrepreneurs of the Year” award), teamwork (Excellence in Technology Transfer “Success through Collaboration” with SPAWAR) and for technology. Lumedyne’s technology was recognized as one of the “Worlds Best Technologies” at the annual World’s Best Technology Showcase. Lumedyne Technologies was acquired in 2015. All details and terms of the sale are confidential.

LymphaTech
Georgia Institute of Technology | 2014 Competitor | www.lymphatechnology.com

LymphaTech is developing a low-cost, highly accurate solution to monitor the risk of lymphedema for cancer survivors. Lymphedema is a swelling disease that affects nearly half of all breast cancer survivors. The company’s technology measures and tracks limb volume to identify symptoms early enough to provide effective treatment. With the ability to quickly and simply scan yourself, you can get back to doing whatever you love, knowing exactly when treatment is needed.

With increased accuracy in measuring and tracking limb volume, LymphaTech’s 3D scanner allows clinicians to diagnose lymphedema within the window of effective treatment. Scanning is completed in a fraction of the time so focus can remain on patient care.

Atlanta-based LymphaTech graduated from the NSF-I Corps program. The company placed sixth overall at the 2014 Rice Business Plan Competition.
**Medical Informatics Corp**  
Rice University | 2013 Competitor | www.medicalinformaticscorp.com  

Medical Informatics Corp (MIC) is a health care company transforming patient data into actionable clinical intelligence. Their product, Sickbay™ is the first and only FDA-cleared clinical intelligence platform. It transforms patient data into near real-time, web-based applications that are easy to use and intuitively designed. Their apps give health care providers the information they need in a design that fits their workflow so they can make informed decisions, improve care and save lives.

In addition to gaining FDA clearance for their device, MIC moved into the life science commercialization cluster at Texas Medical Center Innovation Institute.

**Medtric Biotech, LLC**  
Purdue University | 2012 Competitor | www.medtricbiotech.com  

Medtric Biotech, LLC was founded in 2010 on a vision to deliver scalable and environmentally friendly antimicrobial technologies for use in the medical, industrial and agricultural markets.

The company’s core technology is an innovative, antimicrobial nanoemulsion. The stable nanoemulsion possesses significant antimicrobial activity, and scientific studies have shown rapid inactivation (fewer than 60 seconds) of multidrug resistant bacteria strains such as MRSA (Methicillin-resistant *Staphylococcus aureus*) and VRE (Vancomycin-resistant enterococcus), fungus and viruses. Medtric has implemented this nanotechnology into products designed initially for wound care with additional applications for industrial and agricultural sectors.

Medtric won second place at the 2012 Rice Business Plan Competition and has taken top honors at other competitions. The Medtric team earned Purdue University’s 2013 Award for outstanding commercialization efforts. The Lafayette, Ind.-based company has received grants from Purdue’s Trask Innovation Fund, Indiana CTST for project development, BIOMEDSHIP and Purdue’s Emerging Innovations Fund.

**Mi Viejita**  
London Business School | 2005 Competitor | www.miviejita.com  

Founded in 2003, Mi Viejita is an online retailer selling chilaquiles, salsas and frijoles. Mi Viejita’s products are cooked according to traditional recipes. Its recipes are prepared with 100 percent natural ingredients and no chemical preservatives. Mi Viejita markets its products both domestically and internationally to the hotel and restaurant industry and to retailers such as Walmart and HEB.
Microfluidic Innovations  
*Purdue University | 2010 Competitor | www.microfluidicinnovations.com*

Microfluidic Innovations has developed a programmable lab on a chip, the first multipurpose, software-programmable microfluidic lab on a chip (LoC). Instead of designing assay-specific chips, developers will be able to use a single chip, simply writing or downloading a program for each experiment. Example assays using Microfluidic’s platform have been developed for glucose level testing, particle sorting, enzyme kinetics and bacteria culturing and synchronization.

Microfluidic’s system can cater to wide market segments including contract research organizations, pharmaceuticals and academic research. Microfluidic Innovations has two major global customers.

Headquartered in West Lafayette, Ind., Microfluidic Innovations has been awarded two Small Business Innovation Research Phase I grants. The company also received a grant from Purdue’s Emerging Innovations Fund.

Microlution Inc.  
*University of Illinois at Urbana-Champaign | 2005 Competitor | www.microlution-inc.com*

Microlution is pioneering the development of integrated micro manufacturing solutions for precision parts. Traditional, single-purpose computer numerical control machines are too slow and too expensive to create the micro parts required for today’s advanced automotive, consumer, medical, and aerospace products.

The company develops integrated solutions for manufacturing finished parts in seconds. Built around core ultra-precise, high speed, multi-axis platforms, Microlution combines precision part loading, characterization, machining, and validation from a single system. Their products deliver precision parts faster and more accurately than legacy solutions. The University of Cincinnati BioMicroSystems Labs successfully used Microlution to machine precision microfluidic channels for particle separation and electrochemical solutions.

Microlution has been featured in trade publications including Micro Manufacturing Magazine, Commercial Micro Manufacturing and Engineering TV. With its partners, Microlution has been awarded a grant from the U.S. Department of Energy to develop an energy-efficient method for micromachining complex shapes using ultrafast laser technology. Located in Chicago, Microlution proudly designs and builds every machine in the United States.
MicroTransponder Inc.
The University of Texas at Dallas | 2008 Competitor | www.microtransponder.com

Spun out from the University of Texas at Dallas, MicroTransponder Inc. is a medical device company developing therapies for treating tinnitus and stroke patients.

MicroTransponder developed The Serenity System™ to treat tinnitus. The system pairs an existing therapy called vagus nerve stimulation with listening to tones via headphones. The device is fully implantable and can be used at home. In addition, the University of Glasgow used the company’s neurostimulation system in clinical trials to treat stroke patients.

In addition to successfully completing another clinical study, MicroTransponder closed on a Series C in the fourth quarter of 2015. Their funding comes from venture capital groups as well a grant from the U.S. Department of Defense. The National Institutes of Health awarded eight additional grants.

The company published a paper in Nature magazine and received many awards and accolades including the Tech Titan Award and the Frost & Sullivan Early Stage Investment of the Year Award. Founded in 2007, MicroTransponder is based in Austin, Texas.

Miret Surgical
Stanford University | 2009 Competitor

Miret Surgical is a medical device startup spun out from Stanford University’s Biodesign program. The company designs and develops trans-abdominal, minimally invasive, surgical tools for laparoscopic surgical procedures. These tools allow extremely small incisions that leave no visible scars by enabling the assembly of complex tools inside the patient’s body. Existing scar-free techniques are burdened by steep learning curves and high costs. Miret’s device, called ENGAGE, requires minimal surgeon retraining and aligns with current insurance reimbursement plans.

Miret Surgical participated in the Coulter Foundation’s 2015 Translational Partners Investment Forum.
MODX
Formerly Enterprise Theory | Southern Methodist University | 2009 Competitor | www.modx.com

MODX is a content management platform. It is equal parts PHP (an embedded scripting language used in Web design) application framework and content management system (CMS). MODX excels at web content management and content management framework duties.

The company has two open source CMS platforms: MODX Evolution, released in 2005 and MODX Revolution, released five years later. Both platforms are actively maintained and developed, and each are used by tens of thousands of users to power hundreds of thousands of websites.

Founded in 2004, the company has bootstrapped its way into profitability. MODX has a user and developer community of more than 42,000, and its core software has surpassed two million downloads. It has been translated into over 20 different languages. MODX won the 2013 People’s Choice and 2012 Critic’s Choice for Best Open Source CMS. In April 2013, MODX spun out a cloud platform company, SiphonLabs.

MODX is currently partnering with Ohio State University raising money to develop accessibility technologies for the visually impaired and others using assistive technology. The company’s developers are working on issues such as keyboard navigation, visual contrast, screen readers, and focus indication for an accessible CMS.

Based in Dallas, their operations are supported by employees and contractors in the United States (Dallas, Portland, Taos), Canada (Nova Scotia, British Columbia) and the United Kingdom.

MouseHouse
The University of Chicago | 2013 Competitor | www.mousehouseapp.com

MouseHouse is an iPad plus web application that allows researchers in the life sciences research industry to track experimental data, health and complex breeding schemes of laboratory mice.

MouseHouse saves researchers time and money by delivering three value propositions: proprietary embedded mouse optimization software helps manage breeding schemes and reduce costs by suggesting animals to cull; a collaborative interface allows researchers within a lab or multiple parties within an institution to share and record data for the same animals; and an intuitive iPad drag-drop interface eliminates redundant data entry and saves time. The MouseHouse application is now available on the Mac App Store.

Chicago-based MouseHouse garnered media attention on CNNMoney, CNBC and in the Houston Chronicle. The company was a Silver Winner at the 2013 MassChallenge and a finalist in the 2013 Rice Business Plan Competition.
**Movellus Circuits**
*University of Michigan | 2014 Competitor | movelluscircuits.com*

Movellus Circuits provides innovative mixed-signal IP and design solutions for a wide range of applications. Their analog/mixed-signal IP can be delivered as soft IP or hardened IP in order to provide maximum design flexibility to customers. The soft-IP delivery significantly shortens the design cycle, resulting in reduction in cost and quicker time-to-market. The increased flexibility in design approach allows us to verify our designs extensively over a short period of time. Therefore, we are able to deliver reliable, high performance IP at competitive prices.

Movellus Circuits currently offers a wide range of timing solutions for not only the current market, but also the emerging ultra-low power, low voltage markets. Their constantly expanding product portfolio includes all-digital PLLs, DLLs, digitally controlled oscillators, pulse-width modulators, time-to-digital converters and digital-to-analog converters.

Ann Arbor-based Movellus Circuits won the grand prize of $25,000 as the best emerging company at the 14th annual Great Lakes Entrepreneurs Quest business plan competition in 2015.

**MyHelpster**
*The University of Manchester, England | 2015 Competitor*

Helpsters provide expert help with technology, making the lives of freelancers, entrepreneurs and those who work from home easier and more relaxing. MyHelpster is a place where experts help like friends. All advice is instant, on demand, and available to everyone on a pay as you go basis. With the press of a button the countdown starts and within minutes, a friendly Helpster will help you over the phone and on your device’s screen. Help is available from Technical Helpsters, Office Helpsters, Design Helpsters, Language Helpsters, Marketing Helpster, Programming Helpsters.

MyHelpster uses its own virtual back-office, comprised of the expert knowhow of hand-picked freelancers and a proprietary software platform of collaboration tools to help uses directly on their screen. Through this, MyHelpster ensures that all delivered services are quality assured and of helpdesk standard.

**Nano Precision Medical, Inc.**
*University of California, San Francisco | 2009 Competitor | nanoprecisionmedical.com*

Nano Precision Medical (NPM) is developing a small, easily implantable, all-titanium capsule that provides long-term, constant-rate delivery of therapeutic molecules using a proprietary titania nanoporous membrane technology called NanoPortalTM. Multiple drug candidates can be delivered using NanoPortalTM. Exenatide was selected as the first drug candidate because of the unmet medical needs in Type 2 diabetes mellitus (T2DM) and room for improvement with currently available treatments. The combination of device/drug will improve outcomes by ensuring compliance, with potential to lower overall costs of care. FDA approval will be sought using a 505(b)(2) strategy. The company was featured in the UCSF Magazine, the Berkeley BioEngineering Graduate Newsletter and the San Francisco Business Times.

After spending its early years within the QB3 incubator network, Nano Precision Medical is now based in Emeryville, Calif. The company was founded in 2009 and has funding from angel investors.
NanoLinea
Rice University | 2014 Competitor

NanoLinea creates novel medical treatments based on carbon nanotube fiber technology. Its flagship product is CardioLinea, a minimally invasive, restorative treatment for ventricular cardiac arrhythmia. This type of arrhythmia arises from scar tissue in the heart, which disrupts normal pathways of electrical conduction; heart attack survivors are particularly at risk for this condition.

CardioLinea is a safe, durable, truly therapeutic implant, which restores healthy conduction and avoids the risks and costs associated with currently available treatments. The incorporation of carbon nanotube fiber will allow the company to create a medical implant with an unprecedented combination of conductivity, flexibility and durability.

NanoLinea was the 2014 Grand Prize Winner of the Goradia Innovation Prize. The company has since converted from a limited liability company to a Delaware C-corp. Additionally NanoLinea has been selected to be part of the inaugural class of startups in the TMCx accelerator program.

Navillum Nanotechnologies LLC
The University of Utah | 2013 Competitor

Navillum Nanotechnologies LLC is a chemical manufacturing company. It has developed and patented an innovative method for fabricating quantum dots and other types of semiconducting nanocrystals at commercial scale. Despite the great potential of quantum dot technology, producing them in large-scale amounts is a major barrier to commercialization. Navillum has the solution to bridge this gap so that quantum dot applied technology finally can be supplied to end-use application manufacturers.

Founded in early 2012 by scientists at the University of Utah, the company received exclusive rights on two pending technology patents from the University of Utah. It has received funding support from the National Science Foundation and the Utah Technology Commercialization and Innovation Program. Navillum was a finalist in multiple cleantech competitions including the U.S. Department of Energy’s Cleantech Competition at the University of Colorado, the National Clean Energy Business Plan Competition and Cleantech Open 2012. Additionally, Navillum was a top three finalist in the Governor’s Energy Technology Innovation Award.

Navillum has moved into the BioInnovations Gateway Incubator facility in Salt Lake City, Utah. The Utah Technology Council awarded Navillum with a Utah Innovation Award, recognizing the company’s technology as one of the state’s top eight innovations.

NextPotential
Arizona State University | 2014 Competitor | nextpotential.co

NextPotential is a waste-to-fuel clean energy company that develops and licenses process technology to convert carbon dioxide (CO2) emissions into natural gas at a competitive price.

Their patented photocatalytic technology can be retrofitted to existing infrastructure in a wide range of industries, such as cement processes, wastewater treatment, landfill gas recovery, ethanol fermentation, natural gas treatment, industrial processes, and electric utility.

The company was formed in 2014 and has received funding from the Arizona Commerce Authority, Arizona State University and the Flinn Foundation. The team was a semi-finalist for 2014 MIT Clean Energy Prize and placed in the 2014 Purdue Big Sell Competition. The company garnered mention in The Wall Street Journal and was accepted into the 2014 cohort of the Arizona Furnace Accelerator Program. NextPotential is based in Scottsdale with laboratories in Phoenix, Ariz.
Nikola Labs
The Ohio State University | 2015 Competitor | www.nikola.tech

Nikola Labs is a technology company that specializes in wireless power solutions and radio frequency (RF) energy harvesting for mobile devices. Using a proprietary energy harvesting system, Nikola Labs technology safely and efficiently converts RF signals – like wifi, Bluetooth and LTE – into direct current (DC) power. The result is a clean, usable energy ideal for low-power wireless sensors. This energy will be crucial to powering the Internet of Things – our near future, where everyday objects will operate and communicate independently.

The first application of Nikola’s system is an iPhone 6 case that harvests wasted RF energy transmitted by the phone itself. The self-harvesting case is just one step in a much greater revolution that Nikola Labs is leading, the wireless power revolution, which will define what it means to live and work in the 21st century. This first step is important as it proves that RF can, in certain situations, be recycled effectively for extra power.

Following a grant from Ohio Third Frontier and a Kickstarter campaign, Nikola completed a first round of funding in the second quarter of 2015. They will use the funds for tooling and manufacturing. The company is headquartered in Columbus, Ohio.

Nikweli

Nikweli is a job-matching platform for service and industry workers in Tanzania. They have created an innovative job marketplace platform with an online and mobile access and provision of job-matching services for both employees and employers. After market validation and running a successful pilot phase, Nikweli has gained market traction with its first paying customer and the first job candidate hired through the Nikweli platform. Another significant milestone is the completion of Nikweli’s fully functional job matching platform.

The company continues to attract press and investment community interest in Africa. Selected to participate in DEMO Africa, Nikweli became a member of the ALN Ventures acceleration program in 2015. The company is registered in Tanzania.

NovaBio Technologies
Formerly Ligadon | The University of Utah | 2012 Competitor | dollyholt@gmail.com

Novabio Technologies provides a simple, effective device for ligament and tendon recombination. Ligament and tendon injuries involve lacerations that are treated with sutures, but, as the tendon or ligament stretches, high tension often tears the sutures and often requires repeated surgeries. Novabio’s device equally distributes tension along either end of the ligament or tendon, preventing the tissue from tearing under strain.

The company has filed a nonprovisional patent and a PCT (Patent Cooperation Treaty) patent application. Funding, largely from the NCIIA (National Collegiate Inventors and Innovators Alliance) has been put toward patent fees and prototype development. Novabio has developed a fully functional prototype and has conducted preliminary mechanical tests showing the efficacy of the device. The Novabio team is pursuing licensing with several medical device companies and recently won the grand prize at OneStart.
Novira Therapeutics Inc.
Formerly Molecmo Nanobiotechnologies | Harvard University | 2007 Competitor | www.noviratherapeutics.com

Based in Doylestown, Penn., Novira Therapeutics Inc. discovered and developed first-in-class therapies for the treatment of chronic hepatitis B (CHB) infection, a global disease with a high level of unmet medical need.

Novira Therapeutics built a world-class team with a proven track record of success in drug discovery and development combined with a deep expertise in HBV virology. The R&D team employed innovative chemistry and biology technologies to discover small molecule inhibitors of the HBV Core or capsid protein as well as other drugs with novel modes of action. The company’s novel therapeutic antivirals aim to overcome the limitations of current CHB therapies when used either as mono-therapy or in combination with existing standards of care.

Novira Therapeutics was acquired by Johnson & Johnson in December 2015.

NuMat Technologies
Northwestern University | 2012 Competitor | www.numat-tech.com

NuMat Technologies is a materials technology company changing the way the world stores, separates and transports gases. The company is committed to enabling fundamental performance shifts in the gas storage and separations industries through its tailor-designed nanoporous materials. With its patented supercritical activation technique, NuMat’s synthesized materials retain astronomical internal surface areas. One of its materials holds the world record for surface area, with just one gram being able to cover two acres of land when unfolded.

NuMat is able to rapidly prototype materials with its patented computational tools, screening millions of hypothetical structures in a matter of hours. Its metal organic framework (MOF) patent portfolio is licensed from Northwestern University. The company builds its materials from the ground up with atomic precision and then integrates these materials into high value products and processes.

Named a Top MBA Startup of 2016 by Poets & Quants, NuMat raised additional funding from Chicago’s Clean Energy Challenge. They were awarded contracts by the U.S. Army and the Department of Defense. Featured in the Chicago Sun-Times, The Wall Street Journal, and Fortune, NuMat won both the 2012 Rice Business Plan Competition and the U.S. Department of Energy’s National Clean Energy Business Plan Competition.

Cofounder Chris Wilmer was named to the 2012 Forbes list of “30 Under 30” in energy. NuMat is headquartered in Skokie, Ill., with facilities in the Illinois Science and Technology Park.
**NVBOTS**  
Massachusetts Institute of Technology | 2014 Competitor | www.nvbots.com

NVBOTS® creates automated, enterprise 3D printing solutions that fix some of the industry’s toughest problems. Entirely dedicated to disruptive innovation, our research and development program NVLABS has recently developed the only 3D printing technology that can print multiple metals in the same build, supporting a growing list of metals that includes stainless steel, titanium, nickel, copper nickel, aluminum, zirconium, silver and palladium. Users also print at ultra-high speeds — over 10 times faster than existing solutions — and at a significant cost advantage.

Their flagship product, the NVPro™, is the world’s first end-to-end 3D printing solution with patented automated part removal. Essentially an automated factory in a box, the NVPro runs continuously, 24-7 from any device when paired with the NVBOTS cloud-based interface.

NVBOTS is a Fast Company Top 10 Most Innovative Companies in Education for 2016, and the company’s cofounder, Chris Haid, was named to Forbes’ 2015 list of “30 Under 30” in manufacturing and industry. NVBOTS® is headquartered in Boston, Mass.

**OrthoAccel Technologies, Inc.**  
University of Illinois at Chicago | 2006 Competitor | www.acceledent.com

Based in Houston, OrthoAccel® Technologies, Inc. is a privately owned medical device company developing, manufacturing and marketing products to enhance dental care and orthodontic treatment.

OrthoAccel developed and sells AcceleDent®, the first FDA-cleared clinical approach to safely accelerate orthodontic tooth movement by applying gentle micropulses (SoftPulse Technology) as a complement to existing orthodontic treatment. Used daily by patients for approximately 20 minutes, it can reduce treatment time by 50 percent. The U.S. Patent and Trademark Office issued OrthoAccel a patent for its hands-free AcceleDent in 2013.

Deloitte recently reported OrthoAccel number 69 on the 2015 Technology Fast 500 list. CEO Mike Lowe was recognized as a 2014 Houston Business Journal “40 Under 40” honoree last year. In 2015, the AcceleDent device won the GOOD DESIGN Awards Program and the Best in Biz Award as the most innovative consumer product of the year.

The company and its product, which is offered at more than 2,000 orthodontic locations nationwide and distributed in over 20 countries, have been featured in a number of news outlets including The Business Makers show and ABC News.

**Owlet Baby Monitors**  
Brigham Young University | 2013 Competitor | www.owletcare.com

Owlet Baby Monitors have developed a wireless device to monitor a sleeping infant’s oxygen levels, heart rate and temperature and provide rollover alerts. The Owlet Smart Sock is hypoallergenic, wireless and does not use any adhesives. The electronic components are housed in a water-resistant, medical-grade silicone case to protect the child from any electrical contact. Powered by a rechargeable battery that will last for up to two days, the sock uses Bluetooth 4.0 to wirelessly transmit information to a phone. The accompanying app is available in the iPhone App Store.

Pedal Forward
George Washington University | 2015 Competitor | www.pedalforward.com

Pedal Forward builds sustainable bamboo bicycles that turn heads without breaking the bank and reinvests a portion of their profits into global transportation needs. Over 70 percent of the world’s poor live without adequate transportation. Bicycles empower people to find jobs, go to school and gain access to better health care.

It was this commitment that made them the winner of the 2012 Clinton Global Initiative University Commitment Challenge. They won the Social Impact Venture Prize at the 2015 Rice Business Plan Competition. In February 2016, Pedal Forward completed and exceeded their funding target on Kickstarter.

Perception Robotics
Formerly Somatis Sensor Solutions/Somatis Technologies | University of Southern California | 2011 Competitor | perceptionrobotics.com

Perception Robotics is a sensor technology company focused on biologically inspired, material handling systems. We are the first company to give robots an integrated sense of touch and vision, much like the hand-eye coordination of humans, and a gecko-inspired gripper that requires no power to actuate.

In the past year, Perception Robotics won two SBIR grants: a Phase 1 from NASA and a Phase 2 from the National Science Foundation. Part of the LA Cleantech Incubator, the company is based in Los Angeles.

PhoneSoap
Brigham Young University | 2012 Competitor | www.phonesoap.com

PhoneSoap is a device built to safely sanitize and clean cell phones with powerful, ultraviolet germicidal (UV-C) light. It is a small box that simultaneously charges and sanitizes cell phones using UV-C light, an electromagnetic radiation used in hospitals and clean rooms around the world.

The PhoneSoap Charger plugs into a socket and has an internal USB port to which users can connect a charging cable and their phone, which is then closed inside the box. The charging box contains two UV-C lights that kill 99.99 percent of bacteria and germs in less than five minutes. The charger features an indicator light to let users know when charging is complete and has acoustic outlets to ensure that alarms and notifications can be heard.

In January 2015, the PhoneSoap team pitched their company on Shark Tank and struck a deal with Lori Grenier. They have expanded their product line with a PhoneSoap Polish and a Cleaning Roller. Featured in The Wall Street Journal, Fox News, Inc., MSNBC, WIRED, Mashable and on the Discovery Channel, the PhoneSoap sanitizer is available at Staples, on Amazon, and through the PhoneSoap website and at Staples.
**Picasolar**  
*University of Arkansas | 2013 Competitor | www.picasolar.com*

Picasolar is developing a patent-pending selective emitter technology for crystalline silicon solar cells. The Hydrogen Super Emitter (HSE) process increases solar cell conversion efficiency while reducing the number of silver gridlines. This enables a manufacturer to save money through reduced materials use (silver is the second most costly part of cell processing) while increasing the total watts produced.

The HSE technology is a single step that occurs at the end of the manufacturing line, minimizing downtime and reducing implementation complexity. The HSE process utilizes atomic hydrogen that can be generated from tap water. No toxic chemicals are needed. This technology was developed internally at Picasolar’s sister company, Silicon Solar Solutions, a 2009 competitor in the Rice Business Plan Competition. Both companies are startups working out of the Genesis Technology Incubator at the Arkansas Research and Technology Park.

During the past year, Picasolar expanded their headquarters to include a 2,300 square foot research facility and won a 2015 bronze Edison Award. The company was previously awarded additional grant funding from the U.S. Department of Energy’s SunShot Initiative, allowing Picasolar to scale its early stage prototypes into commercially relevant prototypes.

**Pixel Velocity**  
*University of Michigan | 2002 Competitor | www.pixel-velocity.com*

Pixel Velocity® is a software, sensor and analytics company specializing in industrial automation product solutions. Their remote monitoring solution, hydrocarbon leak detection system and event management platform deliver insight in real time, ensuring reliability, business continuity and safer operating conditions for their customers. Pixel Velocity has an unparalleled understanding of how to empower enterprises to leverage imagery and data to manage risk while providing a significant return on investment in terms of operational efficiency and seamless integration of automated control systems.

Coming off of a Series B funding raise in February 2015, the company announced their release of four new products the following July. Founded in 2001, the company is located in Ann Arbor, Mich.

**PK Clean**  
*Massachusetts Institute of Technology | 2011 Competitor | www.pkclean.com*

Envisioning a world with zero landfill, PK Clean has developed a patented, catalytic depolymerization process to convert landfill plastic into hydrocarbon fuels. PK Clean’s systems are proven to accept mixed and dirty plastic feedstock and require a fraction of the capital cost of anything else commercially available. They are cost-effective enough to operate at a smaller scale, allowing PK Clean to co-locate where the waste is to reduce transportation costs.

PK Clean’s breakthrough technology was initially developed at MIT. In 2013, the company established its first commercial-scale facility by partnering with Utah’s largest recycler, Rocky Mountain Recycling. This plastic-to-oil conversion unit started operating in the same year and is the first of its kind to operate continuously in the United States. The plant can convert 10 tons of non-recycled plastic into 60 barrels of oil each day. The company plans to partner with other recyclers nationwide.

Founder & CEO Priyanka Bakaya was named to the 2012 Forbes list of “30 Under 30” in energy. The company placed third at the 2011 Rice Business Plan. PK Clean has been frequently featured in publications including Fortune, CNN Money, Inc., and the Harvard Business Review. PK Clean currently accepts plastic waste from major corporations and recyclers across the country.
PolyDrop, LLC
University of Washington | 2014 Competitor | www.polydrop.net

PolyDrop, LLC is a specialty chemical company focused on high performance conductive polymer additives for use in large volume applications. The company focuses on problematic electrostatic dissipative coatings with the goal of extending functionality of existing coatings through the facile incorporation of anti-static and static-dissipative properties. PolyDrop’s patented technology was developed in the laboratories of the University of Washington in Seattle.

The PolyDrop formulation uses a proprietary, conjugated polymer nanotechnology that is introduced into coatings as a liquid additive. The additive requires no additional equipment or capital investment for the production line. PolyDrop meets engineering specifications for electrostatic discharge dissipation with significantly less loading than metallic solutions, helping aircraft manufacturers obtain the weight reduction they desire. In addition, PolyDrop’s formulation resists cracking, peeling and chipping, and its adhesive qualities are superior to any other product available.

A MassChallenge Finalist and a TechConnect Showcase Innovation Award winner, PolyDrop was recently awarded a National Science Foundation Small Business Innovation Research Phase II grant. With two provisional patents filed, the company launched new products. They are scaling up production from their manufacturing facility in Washington.

Polytorx, LLC dba Helix Steel
Formerly Torx International | Georgia Institute of Technology | 2003 Competitor | www.polytorx.com

Polytorx LLC manufactures and sells Helix, a steel fiber additive used in varying dosages to reinforce construction concrete. It replaces rebar in concrete. Subjected to more than 10,000 tests both in laboratories and in the field, Helix has been proven to meet or exceed rebar performance in every application of concrete.

Originally designed at the University of Michigan for applications in earthquake and blast resistance, Helix is now used in a broad spectrum of projects ranging from commercial to infrastructure, residential to heavy industrial, shotcrete to precast.

In February 2016, Helix Steel was chosen for New York City’s Metro Transit Authority’s East Side Access Project. Helix will reinforce tunnels connecting Long Island to Manhattan’s Grand Central Station. It is the biggest transportation project in the nation and the first expansion of the Long Island Rail Road in more than 100 years. The company has garnered major entrepreneurial awards including the Michigan Technology Tricorridor Award, and it and was featured on ABC’s Extreme Makeover: Home Edition. As noted on the CBS Evening News, Helix was used to rebuild homes in Joplin, Mo., destroyed by the 2011 tornado.

Helix is manufactured in the United States but sold worldwide from offices in the U.S, Canada, Mexico, Brazil, Australia and Singapore. Located in Ann Arbor, Mich., the company operates two manufacturing facilities, using its own proprietary, high-speed machines for manufacturing.
Power2Switch
University of Chicago | 2010 Competitor | www.power2switch.com | www.interactivebill.com

Power2Switch used design, data, and technology to help consumers make responsible decisions about their energy usage and expenses. The company helped residents and businesses reduce energy costs through an online comparison of competitive rates and an automated switching process to new electricity suppliers. The service was provided free of charge. The company also delivered greater awareness of energy deregulation, created a competitive landscape for suppliers and promoted the use of renewable energy.

Power2Switch, part of the 2011 class at Excelerate Labs, was selected as one of five U.S. startups to participate in President Clinton’s 2011 Clinton Global Initiative. The company was chosen as one of the Top 10 Up and Comers at the Chicago Innovation Awards. It was featured in the Chicago Tribune, Fast Company, Mashable and on the Chicago affiliates of both ABC and NBC.

In September 2013, Power2Switch was acquired by Choose Energy for an undisclosed amount. Choose Energy is an online marketplace for electricity consumers and is based in San Francisco.

PowerMundo
Colorado State University | 2009 Competitor | www.powermundo.com

Based in Fort Collins, Colo., PowerMundo is a clean technology distribution company. It builds and manages a network of international allies, retailers and customers to source, promote, distribute and finance a suite of life-enhancing products.

The company’s cleantech products include solar home lighting systems, information and communication technologies, improved cook stoves and water filtration systems.

PowerMundo improves access to solar and other clean technologies to empower people in emerging markets. By sourcing cleantech products, building a rural distribution network, offering financing options and educating consumers about the cleantech products, PowerMundo provides families with the opportunity to redirect their monthly cash expenditures toward cleaner and more efficient energy sources to promote health, education, clean environments and economic well-being. PowerMundo addresses access to energy in Peru by providing solar products to rural, off-grid communities.

The Inter-American Development Bank chose PowerMundo as winner in the most recent IDEAS Energy Innovation Contest. Winners of the 2015 Startup Peru Contest, PowerMundo’s goal is to expand its geographical reach to serve customers at the base of the economic pyramid throughout Latin America.

Prepify
Massachusetts Institute of Technology | 2015 Competitor | prepify.me

Austin, Texas-based Prepify is making high-end, adaptive, online SAT prep free for students anywhere by charging universities for personal introductions to top admissions candidates on the platform. In addition to launching their ACT prep earlier this spring, Prepify was selected as a semi-finalist for the Common Bond Social Impact Award.
PrepMe Corporation
Stanford University | 2005 Competitor | www.prepme.com

PrepMe was an education company dedicated to bringing high quality, customized learning to students. It launched the first open adaptive learning platform, Coursification. Over the years, the company garnered significant press coverage in publications such as Fortune, Small Business Magazine and CNN.com.

In 2011, PrepMe was divided and sold. Its adaptive learning platform for higher education was acquired by the Providence Equity-backed Ascend Learning. PrepMe’s college test prep and adaptive learning platform for grades K–12 was acquired by Naviance in February 2012.

Pumani
Formerly InfantAIR | Rice University | 2010 Competitor | www.rice360.rice.edu

The Pumani CPAC (continuous positive airway) is a sleep apnea monitor specifically designed for use in the developing world. The device monitors breathing in real time. If 20 seconds elapses with no breathing detected (suggesting an apneic event is occurring), the device activates a vibrating motor that is intended to stimulate breathing to resume. Then, if no breathing occurs within five seconds of the motor’s activation, an alarm is sounded notifying nurses or other health care workers in the area that the child requires attention. A second component has been developed that also allows the electronics to transmit information about the patient’s respiration, including any apneic events, to a central station using a low-cost, low-power Bluetooth transmitter.

In 2014, cofounder Jocelyn Brown was named in Forbes “30 Under 30” list in science and health care.

The Pumani CPAC (formerly the InfantAIR device) continues to combat infant distress syndrome in the developing world. The device was designed by Rice students and presented at the 2010 RBPC. Over 1,000 babies in Malawi have been impacted by the Pumani CPAC device. The project is expanding into South Africa, Tanzania and Zambia, and project managers anticipate licensing the technology to a commercial company for large-scale manufacturing.

Qcue
The University of Texas at Austin | 2008 Competitor | www.qcue.com

Qcue is the world’s first dynamic pricing engine for live entertainment events. Using a scientific approach to pricing, Qcue combines computational analysis and external data sources to allow organizations to adjust pricing multiple times per day.

Sophisticated algorithms analyze real time sales data and other external factors to generate sales and revenue forecasts based on various price recommendations. Once approved, price changes are automatically pushed to ticketing systems that process the changes at the point of sale and across all channels.

Currently in the midst on an international expansion, Qcue’s existing clients include sports teams, performing arts organizations, venues and promoters around the world, spanning three continents and more than dozen of the world’s premier sports leagues. They intend to release a new product in 2017.

Twice named one of the 10 Most Innovative Companies in Sports and one of the 50 Most Innovative Companies in the World, Qcue has added millions of dollars in revenue annually for its clients. It has been featured in major publications including The New York Times, Forbes, The Economist Magazine, and on National Public Radio. Qcue is headquartered in Austin, Texas.
Quad Technologies LLC
Northeastern University | 2013 Competitor | www.quadtechnologies.com

Quad Technologies LLC is developing novel cell separation and protein purification tools to provide improved purity and recovery while maintaining a native stem cell phenotype. The company is currently building on successful manufacturing and feasibility studies of QuickGel™, its lead, patent-pending technology.

Ultimately, Quad Technologies will develop its chemistry beyond research scale and enable stem cell harvesting tools for clinical applications. Stem cells hold the potential to treat life-treating diseases such as non-Hodgkin’s lymphoma, Parkinson’s and multiple sclerosis, but current harvesting technologies destroy these stem cells in the process. Quad Technologies robust QuickGel chemistry will add value to separation technologies, from viable stem cell harvesting to biologics purification.

The company recently launched their MagCloudz™ Streptavidin Cell Separation Kit, the first commercially available product that incorporates their proprietary QuickGel™ technology. Quad Technologies expects to forge new partnerships for develop their technology and refine applications crucial for regenerative medicine in the coming year. Previously, the company secured investment dollars and received a grant from the Center for the Advancement of Science in Space. Quad Technologies is working from its facilities in the North Shore InnoVentures at the Cummings Center in Beverly, Mass.

Quantitative Insights, Inc.
University of Chicago | 2011 Competitor | www.quantinsights.com

Quantitative Insights, Inc. was formed to realize the clinical and commercial value of QuantX, a computer-aided diagnosis system to aid radiologists in more accurate diagnosis of breast cancer.

Developed in the labs and clinics of the University of Chicago to improve outcomes while significantly reducing costs, QuantX addresses critical needs of clinicians, practice administrators and patients. The company intends to provide the world’s first and only breast imaging decision support system with direct correlation to known pathology. In research settings, QuantX has been shown to increase both the efficiency and accuracy of breast cancer diagnosis.

The product is ready for its U.S. market launch; its imaging workstation is awaiting clearance from the Food and Drug Administration. Chicago-based Quantitative Insights is pre-revenue, with first sales expected immediately following FDA clearance.
Rebellion Photonics
Rice University | 2010 Competitor | www.rebellionphotonics.com

Rebellion Photonics’ gas cloud imaging (GCI) technology both sees and quantifies gas leaks for all hydrocarbons, like methane, and other dangerous gases, such as hydrogen sulfide. In addition to showing concentration in parts per million, the GCI system can estimate total volume emitted within 10 percent accuracy. This is by far the most useful method for calculating total methane emissions in a real world environment.

Rebellion Photonics offers their GCI service as fixed installations for continuous monitoring of large facilities, such as refineries, or as a truck-mounted monthly monitoring service at smaller sites like well heads or storage tanks. The monthly GCI service is uniquely suited to meet its customer’s goal of lowering methane emissions by wide-scale, cost-effective gas monitoring.

Founder Allison Sawyer was recognized in Forbes 2014 list of “30 Under 30” in energy and industry. The company was named Startup of the Year by The Wall Street Journal in 2013 and won an R&D 100 award in 2012. In 2015, the company was awarded a grant from the U.S. Department of Energy’s Advanced Research Projects Agency to design a miniature imaging spectrometer for photonic gas monitoring.

Recently featured on CBS News, Rebellion Photonics is expanding its operations and marketing its gas cloud imaging camera for oil rig and refinery safety, both at home and overseas.

RelishMBA
University of Virginia | 2015 Competitor | www.relishmba.com

RelishMBA, the marketplace for MBA hiring, is the platform leading the focus from dedicated on-campus recruiting teams to continuous virtual engagement across many schools, enabling companies to allocate their recruiting budgets more effectively, reach a broader candidate pool and ensure greater applicant diversity and yield.

The company partners with companies to help them a) attract, b) discover, c) engage, and d) track MBA talent earlier in the process, at a widespread reach, and continuously through the recruiting timeline with an online network customized for MBA hiring.

RelishMBA’s goal is to transform the recruiting industry by segmenting the overall hiring market and catering to focused needs, starting with MBAs.

Since launching their first version of the software in June 2015, the company has garnered sales revenue from their more than 50 major corporate clients.
Remedium Technologies, Inc.
University of Maryland | 2008 Competitor | www.remediumtechnologies.com

Remedium Technologies is a medical device startup that operates with a vision of user-directed advancement in the standard of care for the control of severe hemorrhage.

Severe hemorrhage is the leading cause of death on the battlefield, accounting for over half of all preventable deaths in combat. Within the civilian setting, traumatic injuries are the leading cause of death among patients under the age of 44. Currently available products or methods to stop these kinds of injuries are either inherently ineffective or very difficult for most users to implement effectively.

The principals of Remedium Technologies have created a proprietary, life-saving technology called Hemogrip™, which acts to stop traumatic bleeding rapidly. As the active component in a suite of pipeline products under development, Hemogrip is a user-friendly hemostat that is able to orchestrate the self-assembly of a clot-like seal upon contact with blood. It can be used effectively by surgeons, soldiers or by an unskilled “buddy.”

The U.S. Food and Drug Administration granted 510(k) clearance for Remedium’s Hemogrip™ Patch in summer 2015. The company is now focused on building their product pipeline and looking for distribution partners.

Remedium works under grants from the National Science Foundation and the United States Army Research Lab. Additional funding comes from Maryland Industrial Partnerships program, the Maryland Biotechnology Center and TEDCO.

reNature, Inc.
Arizona State University | 2012 Competitor | www.renatureinc.com

ReNature creates sustainable fertilizer from organic waste using advanced biotechnology. The company’s technology reduces the environmental impact and liability of waste disposal while producing a natural fertilizer to replace unsustainable mined and petrochemical-derived fertilizers. Through restoring this nutrient cycle, reNature “reconnects food with its roots.”

The company’s distributed technology reduces landfill environmental management costs. It utilizes organic waste that bio-mass energy and fuel plants do not want to handle and that are a liability for industrial customers, even after it is sent away.

The company is currently producing a limited quantity of its liquid microbial biostimulant for development partners in agriculture, turf management, and controlled environment systems. reNature was a 2013 Mass Challenge finalist and received funding from the National Collegiate Inventors and Innovators Alliance.
Reveal Design Automation
University of Michigan | 2010 Competitor | reveal-da.com

Reveal Design Automation is an electronic design automation startup developing software tools and technologies for verification of complex semiconductor designs.

With fully automated solutions enabling highly scalable architecture validation, formal verification runs that take days with competing solutions can now be completed in hours with Reveal. Where a typical verification cycle for a new chip design requires dozens to hundreds of such verification runs, Reveal can save chip designers millions of dollars in verification expense, reduce time-to-market by months, and significantly improve confidence in chip design correctness.

Based in Ann Arbor, Mich., Reveal is currently a member of the University of Michigan’s Venture Accelerator and a recent recipient of investment money from the Zell Lurie Commercialization Fund. With the influx of funds, the company hopes soon to double its headcount and continue developing its technology in order to raise a Series A in the next couple years. Reveal was a finalist at the 2010 Rice Business Plan Competition.

Sanergy
Babson College and Massachusetts Institute of Technology | 2010 Competitor | saner.gy

To combat the lack of sanitation in the ever-expanding slums of Nairobi, Kenya, Sanergy is developing a comprehensive sanitation infrastructure that has significant environmental, health, economic and social impact.

Sanergy franchises high quality, low-cost toilets to local entrepreneurs. It creates an efficient, equitable, and sustainable sanitation cycle by building a dense network of small-scale sanitation centers across the slums, providing a low-cost containerized waste collection infrastructure, and converting this waste at its central processing facility into electricity, fertilizer and other high margin products.

Through its network of almost 320 operators, Sanergy has opened 626 Fresh Life Toilets facilities serving 26,000 people daily. Its waste collectors pick up about 50 tons of waste each week with no spills and a perfect daily collection record. The solid waste is converted into a nutrient rich organic fertilizer, lab-tested, and approved for mineral content and safety levels. The liquid waste is sold to coffee farms as a high nitrate fertilizer.

Sanergy continues to win awards and recognition for its work and recently attracted additional funding to increase fertilizer production in Kenya. It was a winner of the U.S. Agency for International Development competition for development ideas, co-funded by the Bill & Melinda Gates Foundation and USAID. The Lemelson Foundation awarded Sanergy its inaugural Sustainable Practice Impact Award; the award was given by the National Collegiate Inventors and Innovators Alliance (NCIIA) and funded by the Lemelson Foundation. Additionally, Sanergy made Fast Company’s list of Most Innovative Companies dedicated to social good.

The company has received global media attention from Forbes, Voice of America, Businessweek and Scientific American.
Saranas, Inc.
Rice University | 2013 Competitor | saranas.com

Saranas, Inc. is a medical device company focused on improving patient outcomes through early detection of complications from internal bleeding. The company’s patented technology allows for the rapid detection of these complications and enables physicians to mitigate the downstream consequences by addressing the complication immediately, using accepted, straightforward adjustments to the flow of the procedure.

The system is composed of a standard cardiac sheath that is surrounded by an array of electrodes. These electrodes measure the difference in electrical resistance across the vessel. When a vessel is ruptured, blood begins to accumulate outside of the vessel, causing a change in the electrical resistance. The Saranas system is sensitive enough to detect as little as 30mL of blood accumulation.

First place winners of the 2013 Goradia Innovation Prize, Saranas recently closed on a new round of funding and were featured in Xconomy. They partner with the industrial design firm Cambridge Consultants to help develop their product. The company is based in Houston, Texas.

Scan
Formerly QR Code City | Brigham Young University | 2011 Competitor | scan.me | www.snapchat.co

Founded in 2011, Scan created web and mobile experiences and tools that enable both enterprises and individuals to benefit from mobile transaction technologies (QR codes, NFC and more). These benefits included mobile web pages, mobile commerce, social media, lead generation and analytics.

In late 2014, Scan was acquired by SnapChat, a Venice, Calif.-based social media company.

Seismos
The University of Texas | 2013 Competitor | seismostechnologies.com

Headquartered in Austin, Texas, Seismos is a technology provider for the oil and gas industry offering real-time, subsurface fluid-flow imaging. They enable operators to achieve sustainable production uplifts through cost-effective, scalable, software platforms and cloud based field instrumentation that power real-time data driven actions.

Released in January 2016, Seismos K-View™ CO2 active flood surveillance drives a dramatic boost in oil production by revealing in-situ fluid progression and providing real-time, actionable feedback to help operators maximize pattern effectiveness and produce more oil — faster and with better economics. The platform consists of field-installed low impact emitters and seismic sensors connected to a cloud-based data processing platform that generates maps of CO2 movement over time.

In addition to its proprietary developed technologies and software, Seismos has an exclusive technology licensing agreement with the Lawrence Berkeley National Laboratory for all applications of its K-wave and related patent portfolio.

Following its win of the Shell Technology Ventures Award at the 2013 Rice Business Plan Competition, Seismos won first place in the Energy/Cleantech division at the UC Berkeley Startup Competition and the Energy/Cleantech Wells Fargo Award at the Global Venture Labs Investment Competition in Austin.
Semprus BioSciences
Formerly SteriCoat | Massachusetts Institute of Technology | 2007 Competitor | www.teleflex.com

Semprus Biosciences was a venture-backed biomedical company designing new tools to prevent infection and thrombus-related complications in patients with implanted medical devices. Semprus Sustain™ Technology is a permanent, nonleaching, biomaterial modification that chemically bonds to the surface of the implant device. The technology vastly improved patient outcomes by preventing serious medical complications such as infection, blood clots, improper healing and cell overgrowth.

In June 2012, Semprus BioSciences was acquired by Teleflex Inc., a Pennsylvania-based medical device company.

SensorHound
Purdue University | 2013 Competitor | www.sensorhound.com

SensorHound™ has developed Internet of Things (IoT) specific operations monitoring software that is proactive, automated, and systematic. Their suite of software products provides continuous in situ deployment monitoring and sends immediate alerts with detailed diagnostic information when software failures or security intrusions are detected. Based on patent-pending technology developed by leading IoT researchers, SensorHound’s award-winning solutions are proactive, automated, and easy to integrate — all with an unbelievably small footprint. Their breakthrough solution can significantly reduce the operational and maintenance costs of IoT deployments.

Products include SensorTracer™ for real time detection of software failures and intrusions, SensorCloud™, a cloud-based dashboard for monitoring deployments, and SensorDoctor™, a forensic tool for source code diagnostics on each individual node.

Since their launch, they have received awards from the National Science Foundation, Purdue Research Foundation, The Alchemist Accelerator, Founder.org, and TiE. SensorHound has offices in West Lafayette, Ind. and Santa Clara, Calif.

Silicon Solar Solutions
University of Arkansas | 2009 Competitor

Silicon Solar Solutions is a photovoltaics research and development-based company. The technologies developed by Silicon Solar Solutions utilize abundant, non-toxic, materials that minimize negative environmental impact and are easily recyclable.

Silicon Solar Solutions received the highly competitive SunShot Incubator Award from the U.S. Department of Energy. The application funds for the SunShot project were awarded though a Technology Transfer Assistance Grant from the Arkansas Science & Technology Authority. In 2013, the company spun out Picasolar, a Rice Business Plan Competition competitor in 2013. Inventors Digest recognized founders Douglas Hutchings and Seth Shumate as the Nation’s Top New Inventors. The company is an Innovate Arkansas client firm based in Fayetteville, Ark.
SiNode Systems
Northwestern University | 2013 Competitor | sinodesystems.com

Chicago-based SiNode Systems is a battery materials venture developing silicon-graphene anodes for the next generation of lithium-ion batteries. SiNode anodes offer higher battery capacity and faster charging rates, all while being produced via a low cost solution chemistry-based manufacturing process. SiNode seeks to change the landscape for lithium-ion batteries so they can meet the demands of a wide range of industries, from consumer electronics to electric vehicles.

The company’s core technology was developed at Northwestern University, and SiNode’s founders are all Northwestern graduates from the business and engineering schools. The company has been issued two U.S. patents.

Co-founder Cary Hayner was named as one of Forbes 2016 “30 Under 30” in energy. SiNode Systems is the recipient of a 2013 Department of Energy Phase II Small Business Innovation Research Award and is the Grand Prize Winner of both the 2013 Rice Business Plan Competition and the 2013 National Department of Energy Business Plan Competition.

SiNode’s headquarters is located in the University Technology Park at the Illinois Institute of Technology where it recently expanded its manufacturing space.

SioTeX Corporation
Texas State University | 2014 Competitor | www.sio-tex.com

SioTeX® is a silica manufacturer, developing a drop-in replacement for fumed silica called Eco-Sil™. Their patent-pending technology uses rice hulls, an abundant biowaste, as the raw material. The process is much simpler than the conventional method, consumes substantially less energy and involves no toxic reactants. Target markets include paints, plastics, and tires. Eco-Sil is also generally recognized as safe by the Food and Drug Administration and contains no heavy metals.

The company’s technology won an Environmental Protection Agency award for its ability to reduce rice hull landfiling and field burning. SioTex is headquartered in San Marcos, Texas.

SmarterShade Inc.
University of Notre Dame | 2011 Competitor | vgsmartglass.com

SmarterShade was a cleantech research company developing new technology for smart glass. Smart glass is an emerging class of clean technologies that uses stable polarizing and retarding films to electronically tint a clear window with the flip of a switch. They places fifth overall at the 2011 Rice Business Plan Competition.

SmarterShade presented their technology at the White House in June 2015, and the company was chosen as a finalist for the Chicago Innovation Awards. In January 2016, Forbes recognized cofounder Will McLeod as one of their “30 Under 30” in manufacturing and industry.

In July 2015, SmarterShade’s key human resources and assets were acquired by VG SmartGlass. VG SmartGlass was founded in 2014 as an entity specifically to commercialize the technology from SmarterShade Inc.
Soko
Formerly SasaAfrica | Massachusetts Institute of Technology | 2012 Competitor | shopsoko.com

Soko is an innovation in global fashion and technology, an online store that connects online consumers to global makers and handcrafted jewelry from the developing world. With Soko, people can discover incredible design and creative ingenuity originating in communities outside of the digital economy. Soko delivers exceptional style with stunning handcrafted jewelry designs created by artisans in emerging economies, using natural and upcycled materials.

Soko was created by women for women to help “fashion a better world” through the equitable direct trade of beautiful goods between artisans in the developing world and web consumers worldwide. Working in the bottom of the pyramid communities around the world, the founders realized that by leveraging technology and existing infrastructure in an innovative way, they could create a platform to enable any talented artisan to participate in international trade. The Soko solution transforms the mobile phone into a tool that expands access to economic opportunity for artisans in underserved communities. This new technology revolutionizes international trade by using technology facilitation to cut out the traditional middlemen, reducing logistical costs and increasing profits for artisans.

Co-founder Catherine Mahugu is on Forbes’ 2016 list 30 Under 30 for social entrepreneurship and was one of Forbes’ 30 Most Promising Entrepreneurs in Africa 2015. The company partners with the United Nations Trust Fund to end violence against women and is one of 10 global ventures selected to participate in the inaugural Girl Effect Accelerator. Soko has offices in Nairobi, Kenya, and New York City.

SolidEnergy Systems
Massachusetts Institute of Technology | 2012 Competitor | solidenergysystems.com

SolidEnergy revolutionized portable energy storage with the introduction of the “anode-free” lithium metal battery in 2014.

Their two material platforms, dual-layer electrolyte and ultra-thin lithium metal anode, provide transformational energy density and safety across all rechargeable lithium batteries and can be seamlessly integrated into existing Li-ion manufacturing capability. The final applications include drones, watches and wearables, smart phones, and electric cars.

SolidEnergy was founded in 2012 during the turmoil of the lithium battery industry meltdown. Their mission is to power people's lives, whether they are communicating with loved ones on a phone or driving with family in an electric car.

The company just closed a Series B funding round led by a major U.S. automaker. SolidEnergy placed fourth in the 2012 Rice Business Plan Competition and was a finalist in the U.S. Department of Energy’s National Clean Energy Business Plan Competition. Founder Qichao Hu was named to the 2012 Forbes’ list of 30 Under 30 in Energy. Based in Waltham, Mass., Solid Energy is part of the Route 128 Innovation District.
Soltage, Inc.
Yale University | 2006 Competitor | www.soltage.com

Jersey City, New Jersey-based Soltage is a leader in the development, financing and operation of utility-scale solar power systems for commercial, industrial and municipal customers across the United States. Soltage has developed 35 solar energy projects with 85 MW total distributed generating capacity under management. Cofounders Vanessa Stewart and Jesse Grossman were named Ernst & Young Entrepreneur of the Year, New Jersey, finalists in 2011.

In 2015, Soltage secured multimillion-dollar commitments from partners including Tenaska and John Hancock Life. The funds support Soltage’s continued growth and an expectation to establish 125 megawatts of solar projects during 2015 and 2016.

In addition to providing funding, Tenaska acquired a controlling interest in Soltage. Tenaska, a leading independent power producer, is based in Omaha, Nebraska. Forbes lists them as one of the 25 largest privately held companies in the United States.

Sonikure Technology Limited
The Hong Kong University of Science, Hong Kong | 2015 Competitor | www.sonikure.com

Sonikure Technology Ltd is a Hong Kong-based medical device startup focused on developing and commercializing the ultrasound-based drug delivery system for treating eye diseases.

They have one U.S. patent granted, and their technology was featured in Google Solve for X. Selected as Top 50 global startup by the Kairos Society, Sonikure is funded by university and government grants. They are headquartered in Hong Kong.

Spogen Biotech, Inc. dba Elemental Enzymes
University of Missouri | 2012 Competitor | www.elementalenzymes.com

Elemental Enzymes provides research and product development for enzymes in agriculture and other markets. The company specializes in the production of stabilized enzymes specifically designed for survival and activity in harsh conditions, whether outdoors or in industrial processes.

In addition, Elemental Enzymes creates customized enzyme solutions for common contaminants found in the environment, as well as the creation and production of enzymes for nonenvironmental applications. The Elemental Enzyme founders have two companies: Spogen Biotech Inc., dba Elemental Enzymes, and its subsidiary, Elemental Enzymes Ag&Turf, LLC.

The company recently announced a research partnership with Bayer CropScience, a top crop science company. Elemental Enzymes is based in Columbia, Mo., but the team has bought a building and will expand the company to St. Louis later this year.
RBPC Success Stories

SPEOUTS of Water
Harvard University | 2014 Competitor | www.spoutsofwater.org

SPOUTS of Water manufactures affordable and effective ceramic water filters to provide clean drinking water access to the East African community. SPOUTS (Sustainable Point-Of-Use Treatment and Storage) of Water seeks to economically empower local citizens, engage the surrounding communities and provide cost-effective water treatment systems, all in an effort to alleviate the plethora of issues caused by a lack of clean drinking water.

Over the last year, the company has made close to 4,500 water filters used by over 50,000 people. They hope to increase their output to 1,000 or more per month in the year to come. Since competing at Rice, the company has relocated its Ugandan manufacturing site to quadruple its production capacity. They have redesigned their filter buckets and installed large-scale filters for Nyero primary school, providing clean drinking water access to more than 1,000 schoolchildren. SPOUTS of Water plan to open retail shops and sell their filters through third-party distributors and NGOs.

Featured on NBC News, SPOUTS of Water was runner-up for the President’s Challenge Honorable Mention for the McKinley Family Grant for Innovation and Entrepreneurial Leadership, received funding from USAID, and participated in the Unreasonable Institute East Africa.

Sproxi, Inc.
Formerly mPedigree Logistics | Dartmouth College | 2009 Competitor | www.sproxil.com

Sproxi® is a venture-backed enterprise that provides world-class brand protection services in emerging markets. The company’s Mobile Product Authentication™ (MPA) solution helps ensure purchased goods are not stolen or counterfeit by allowing consumers to verify product genuineness within seconds through a text message. Compatible with any tangible item, MPA is widely used by leading pharmaceutical companies to curb the multibillion dollar counterfeit drug industry. Sproxi has also expanded into nonpharmaceutical industries including automotive, agribusiness, and fast moving consumer goods. The company has more than 15 million verifications to date.

FORTUNE listed founder and CEO Ashifi Gogo to the 2015 list of “40 Under 40.” Sproxi received the U.S. Patent and Trademark Office Humanity Award in Information Technology and the company also ranked number one in health care and number seven overall in Fast Company Magazine’s World’s 50 Most Innovative Companies. They won the 2009 Clinton Global Initiative Outstanding Commitment Award and received regulatory endorsements in Nigeria and Kenya. Headquartered in Cambridge, Mass., Sproxi continues to expand across Asia and Africa.

Stasis Labs
University of Southern California | 2015 Competitor | www.stasislabs.com

Stasis Labs offers a connected vital sign monitoring system to drive low-cost hospital innovation. They target emerging market hospitals through their custom vitals monitor, tablet application, and cloud backend. The company’s technology ensures caregivers always know the status of their patients’ health. We are scheduled to enter the rapidly growing Indian health care market at the beginning of 2016.

Stasis Labs was chosen as one of Inc. Magazine’s “Coolest College Startups of 2015.” The company was accepted into the TechStars Healthcare Accelerator and is in partnership with Cedars-Sinai. After a successful hospital pilot, they intend to launch their monitoring system in summer 2016.
**Taxcient**  
Formerly vAudit Group, Inc | San Diego State University | 2004 Competitor | www.avalara.com

In business for six years, Taxcient was a sales and use tax compliance software provider. The company was founded with the intent of relieving corporate tax departments of the time consuming and costly effort required to report sales and use tax across multiple jurisdictions. Designed by former state tax auditors, the software provided an alternative to the administrative burden of state and local tax compliance. The software was trusted by some of the leading companies in the world to provide accurate sales tax compliance with minimal cost.

In 2010, Taxcient merged with Avalara, the leading provider of web-based sales tax automation. The merger marked a major milestone in the companies’ common quest to revolutionize the sales and use tax management industry via the application of leading-edge technology and top-flight tax knowledge and expertise.

**The Eye Tribe**  
Formerly Senseye | IT University of Copenhagen | 2012 Competitor | theeyetribe.com

The Eye Tribe is an award-winning innovator of eye tracking technology and an Original Equipment Manufacturer (OEM) technology partner that delivers fast, affordable solutions for integrating eye tracking into Virtual Reality/Augmented Reality smartphones, tablets, computers, automotive, TV, entertainment, and gaming devices.

The Eye Tribe software enables touchless interaction and control of consumer devices, eye-based authentication, and visual attention analytics. The Eye Tribe’s software is unique, because it relies only on low cost components. It relies on combining its proprietary software with OEM hardware, using only standard components that can be integrated into the next generation of consumer devices.

Based in Denmark, The Eye Tribe was founded in 2011 and has received many awards for its technology innovations, including five Innovation Awards at the Consumer Electronics Show and being a finalist in Sir Richard Branson’s Extreme Tech Challenge 2015.

**TheraBracelet**  
University of Louisville | 2014 Competitor | www.therabracelet.com

TheraBracelet is an early stage startup in the wearables industry. IGNITE is the only wearable platform that actively enhances physical performance.

The technology will transform the current landscape of a passive, sensor-driven, wearables industry through the company's groundbreaking platform technology that actively enhances a user's physical performance. IGNITE incorporates a neuroscience-based and patent-pending vibration technology to instantaneously improve reaction times, motor skills, strength, and sensitivity in the hands. The company is based in Louisville, Kentucky.
TheraNova, LLC  
Duke University | 2003 Competitor | www.theranova.com

Located in San Francisco, TheraNova is a medical device company developing solutions for large markets with unmet needs. This is accomplished by internal concept generation and development and by external project support.

TheraNova is an intellectual property holding company that files patents and incubates a variety of medical device technologies that include an endoscopic obesity therapy, an implantable shunt to remove chronic abdominal fluid, and a noninvasive incontinence therapy. TheraNova also supports external projects through traditional research and development. The company has successfully spun out or seed funded several venture capital-backed companies including BAROnova, Sequana (formerly known as Novashunt, Velomedix, Channel Medsystems, Portero Medical and EMKinetics).

All of TheraNova’s technologies have a common element: each was designed based on the observation of a definitive need identified by one of the founders through clinical practice. Once the need has been defined, TheraNova works to develop proprietary technologies to fill that need. The resulting technology is either licensed or becomes the centerpiece for a viable spinout. In March 2014, Founder Daniel Burnett was recognized as Emerging Medical Technologies Innovator of the Month in a report from Life Science Intelligence.

TITIN Tech  
Georgia Institute of Technology | 2011 Competitor | titintech.com

TITIN Tech creates weighted fitness products designed to enhance and improve any athletes’ experience in pursuing fitness. TITIN Tech uses patented, gel-weighted compression units to work naturally with major muscles and evenly create a perfect workout.

In October 2014, TITIN founder Patrick Whaley struck a deal with Daymond John after pitching his business on Shark Tank. Recently, John said he considers TITIN Tech is one his two best investments.

Founder Patrick Whaley was chosen in March 2016 to receive the AATCC Young Entrepreneur Award. TITIN Tech gear is used by the U.S. Navy SEAL team, athletes from the NCAA, NFL, NBA, MLB and the PGA. The company and their products have been featured in national and international media. TITIN is headquartered in Atlanta.

TNG Pharmaceuticals  
University of Louisville | 2011 Competitor

TNG Pharmaceuticals is focused on the research and development of its patented vaccine, FlyVax. FlyVax is a revolutionary veterinary vaccine that is expected to inhibit the horn fly’s ability to effectively feed on cattle. FlyVax counteracts the horn fly’s anti-clotting agent, Thrombostasin, by triggering an immune response that clots the blood at the point of the wound. The horn fly’s inability to feed thus directly affects reproduction capabilities, leading to the potential systematic eradication of horn fly populations. Smaller horn fly populations can directly translate into lower infestations per cow, which leads to less stress, more weight and more milk yield.

Currently, the company is working on the development side of their vaccine and navigating the waters of the USDA. TNG Pharmaceuticals won first place at the 2011 Rice Business Plan Competition. They have been featured in articles published by Fortune, Inc. Magazine and The Wall Street Journal. TNG Pharmaceuticals is based in Louisville.
Translate Abroad
University of Illinois at Urbana-Champaign | 2010 Competitor | waygoapp.com

Using optical character recognition, Waygo by Translate Abroad entered its market by translating Chinese to English. The app worked by simply holding a smartphone camera over the characters with no need for an Internet connection. It is also a helpful tool for language learners to master new words and phrases. The company has since announced translation for Japanese, Korean and vertical text. Waygo uses proprietary algorithms to create simple phrases. Rated a 4+ in the App Store, it can be downloaded for free.

It has received media attention from Tech Crunch, GigaOM, and Forbes. Currently, Translate Abroad is part of the 500 Startups Accelerator located in Mountain View, Calif.

Traycer Systems, Inc.
Formerly Traycer Diagnostic Systems, Inc. | The Ohio State University | 2008 Competitor | www.traycer.com

Traycer Systems, Inc. develops and commercializes cost-effective, real-time components and systems for the growing terahertz imaging market. Since 2008, the company has been exploiting the terahertz frequency spectrum for broad commercial applications with a patent-pending, breakthrough imaging capability that has resulted in the only THz camera currently capable of reliable, cost-effective application development. The system delivers significantly improved detection and accuracy characteristics that allow users to capture more critical information, thereby moving imaging capability from simple detection to diagnosis and complete analysis. Traycer expects to build on this unique and superior performance to become the standard for THz imaging systems.

Proceeds from a round of funding are being used to complete product commercialization of Traycer’s broadband terahertz imaging systems and components.

Traycer Diagnostic Systems, Inc. is a spinout from Ohio State University and the University of Notre Dame. It has received funding from Phoenix Venture Partners, TechColumbus, Ohio Tech Angels, and the U.S. Department of Defense. The company is located in Columbus, Ohio.

Tremtex
Johns Hopkins University | 2015 Competitor

Competing as Tremtex at the 2015 RBPC, a team from the Center for Bioengineering Innovation & Design at Johns Hopkins University is designing the STIMband. Designed for Parkinson’s patients, it is a noninvasive electrical stimulation device, which delivers low and safe doses of transcranial direct current stimulation, to the motor cortices of the brain. The result is the reduction of motor symptoms, including tremors, and improved mobility.

Although no company has yet been launched, the team won second place at VentureWell’s BMEidea and the TREAT Prize in 2015. The project won a stage 1 e-team grant.
TriboTEX  
Washington State University | 2015 Competitor | tribotex.com

TriboTEX is a startup commercializing nanoparticle with self-organization properties that lead to formation of very lubricious protective coatings during normal operation of machinery.

Founded in Pullman, Wash., TriboTEX offers a clean alternative to currently available lubricating blends that improves mechanical output by utilizing a self-assembling, nano-structured coating to simultaneously reverse wear while enhancing lubrication. Having achieved traction through various business plan competitions and obtained funding from various institutions including the National Science Foundation (NSF), TriboTEX has grown to develop a working prototype that is primed for commercialization and is currently pursuing further funding in order to produce products at a volume that will allow for sustained growth and continued success among target markets. With a broad range of applications, TriboTEX’s thin film-forming lubricating blends offer the highest potential value to the automotive and wind power industries.

Tympanogen  
Tulane University | 2014 Competitor | www.tympanogen.com

Tympanogen, Inc. is a medical device company. They are commercializing a gel patch for repairing chronic eardrum perforations without the need for surgery.

These perforations often result from pressure-equalizing tubes needed to relieve middle ear infections. If left untreated, these perforations may lead to recurrent infection, hearing loss, nerve, and brain damage. Current therapies require invasive surgeries with potentially low success rates.

Their patent-pending gel patch product, called Perf-FixTM, replaces the current surgical therapy with an in-clinic procedure. Preliminary studies have shown Perf-Fix to double the success rate of the current surgical procedure while actively preventing recurrent infection. Perf-Fix is the singular nonsurgical alternative among currently available products.

Tympanogen received a grant from Virginia’s Commonwealth Research Commercialization Fund. Perf-Fix is still in development and is not for sale. The company is headquartered in Norfolk, Va.

US Chia  
Formerly Kentucky Chia | University of Louisville | 2012 Competitor | uschia.com

US Chia is an agricultural startup based in Louisville, Ky. Chia seeds are rich in fiber, antioxidants and protein. With the highest concentration of plant-derived omega-3s, chia seeds are instrumental in preventing colic and laminitis, the two leading causes of premature death among horses. The company was recognized in The Wall Street Journal.

Founded in 2011, US Chia is headquartered in Louisville.
**Veran Medical Technologies**  
**Vanderbilt University | 2003 and 2004 Competitor | www.veranmedical.com**

Veran Medical Technologies is a privately held medical device company, headquartered in St. Louis, Mo. The company has developed and commercialized a unique SPIN Thoracic Navigation System, which includes a hybrid lung cancer diagnostic procedure called SPINPerc. SPINPerc combines two main platforms: navigational bronchoscopy and percutaneous navigation to give physicians more tools in a single procedure to diagnose early stage lung cancer.

A 2014 funding round is supporting Veran’s commercial expansion in the U.S. and a global launch of the Veran Thoracic Navigation System. The company was recently awarded two U.S patents that protect their 4D respiratory tracking and expects that their lung navigation and biopsy technology will compete with Medtronic’s. Veran Medical Technologies placed third in the 2003 Rice Business Plan Competition.

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**Veritas Medical**  
**The University of Utah | 2015 Competitor | www.lightlinemedical.com**

Hospital-acquired infections are one of the most serious and preventable complications that face health care today. Veritas Medical, LLC was formed in 2012 with the goal to make a positive impact in health care quality and safety with regards to these infections.

They have developed a novel antimicrobial technology that actively disinfects catheters and other medical devices while residing within a patient’s body. This technology can be translated into many health care applications and environments including the prevention of blood stream and urinary tract related catheter infections, ventilator associated pneumonia and infections associated with wound and surgical sites. Veritas Medical believes that nosocomial infections are completely preventable and hope that through implementation of their technology, they can save millions of lives and billions of health care dollars.

Veritas Medical is starting their Phase I clinical trials in June 2016. They won fourth place at the 2015 Rice Business Plan Competition.

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**VuPad**  
**University of California, Los Angeles | 2014 Competitor | www.vupad.co**

VuPad is a mobile-augmented reality app that offers users a way to visualize store furniture scaled-to-size in their own space. Using a tablet’s camera, the VuPad app dynamically places high-quality 3D furniture models in the viewing panel so that users can rotate and arrange furniture. Once everything is placed and fits, users can take a picture of the room and order the furniture online.

The company targets online home shoppers as well as real estate agents and interior designers as end users who need a simple way to visualize and showcase furniture in a room and will create custom apps for online furniture retailers looking to differentiate themselves from the growing number of competitors in the online household furniture sales market. It will attract customers looking for an easy and exciting new way of shopping for furniture.

VuPad is available in the app store.
WAVE Stream, Inc.
University of Houston | 2014 Competitor | www.wavstream.com

WAVE Stream Inc. is a water filtration company. They produce patented technologies that significantly enhance contaminant removal capabilities for existing water filtration membranes and systems. The unique properties enable existing water filtration systems to simultaneously remove various contaminants such as bacteria, heavy metals, chemicals and volatile organic compounds from the water. WAVVE’s technology is applicable for the wastewater, household, agriculture, and oil and gas industries.

The company produces two different products based on similar nanotechnology components. The materials are non-toxic to human cells. First is a liquid coating solution for smaller scale that can be applied to different types of filter membranes including ceramic, nylon, cellulose nitrate and glass fiber. The company also provides beads for larger scale application that can easily be integrated to different water purification filters, for either small or large scale.

Headquartered in Houston, the company has been featured on PBS, Houston Public Media and KHOU11. Working to raise a seed round, WAVVE has just won the Brew Corporate contest held by the Wisconsin Economic Development Council and The Water Council (Milwaukee). The Brew is the Water Council’s business accelerator.

WiPower, Inc.
Massachusetts Institute of Technology | 2007 Competitor

During its four years in business, WiPower Inc. was widely recognized as the technology leader in the wireless power marketplace. The company developed and commercialized the world’s first wireless charging systems capable of extended range charging, insensitive to the position and orientation of receiving devices relative to a charging station. They distributed its commercial and industrial product solutions across the United States and in Japan. WiPower filed 17 U.S. patents related to wireless power technology and counted numerous Fortune 500 companies among its customers.

In 2010, WiPower was acquired by Qualcomm for an undisclosed amount.

WISE Systems
Harvard University | 2015 Competitor | www.wisesystems.com

Wise Systems is an enterprise software solution that helps companies make real-time delivery decisions. Their platform schedules drivers while considering multiple constraints like customer time windows, traffic, and service time. Additionally, Wise automatically dispatches schedules to drivers. Their software recalculates schedules in real-time as things change.

They are a Top 10 Techstars Mobility Company.
Xip
Formerly Silicon BioDevices and Integrated Diagnostics | University of California, Berkeley | 2009 Competitor | xip.life

Xip is a medical device company developing a lab on a microchip. Their product, GO, is a disposable blood analyzer that wirelessly uploads lab-quality clinical measurements in minutes.

At the core of the GO platform lies a fully integrated molecule counter. Multiple proteins, nucleic acids and small molecules can be measured simultaneously from one drop of blood, on the GO. The single-use disposables are produced inexpensively using existing high-volume semiconductor manufacturing capacity.

These devices will be deployed in Emergency Departments initially to simplify the process of diagnosing heart attacks by providing on-demand, high-sensitivity biomarker measurements.

Ziosk
Formerly TableTop Media | Southern Methodist University | 2006 Competitor | www.ziosk.com

Based in Dallas, Ziosk is the first entertainment, ordering and pay-at-the-table tablet touchscreen for the restaurant market. The technology, featuring a seven-inch Android OS touchscreen and credit card reader, resides on each table and allows the guests to see menu items, play games, view news, order food and beverages and “pay on demand,” which give guests control over their dining experience. With its interactive capabilities, Ziosk and its footprint have created the Ziosk Media Network, a digital media platform for partners to create engaging experiences at the point of purchase. Ziosk and the Ziosk Media Network are revolutionizing the experience and economics of dining.

Ziosk has been featured in Fortune, The New York Times, The Washington Post and The Wall Street Journal. It has received numerous accolades and awards and was named one of 100 Brilliant Companies of 2011 by Entrepreneur.

Founded in 2008, Ziosk currently serves over 50 million guests each month across the nation. They intend to venture into the online ordering arena in summer of 2016. As one of the Dallas Fast Tech 5, they are one of the fastest growing businesses in Dallas.