

**101 Edu****Carnegie Mellon University | 2017 Competitor | www.101edu.co**

101 is a venture-backed startup that is transforming the college STEM education with a next-generation active learning platform that promotes student engagement and improves student outcomes. Their first product for chemistry, Chem101, has quickly grown from 8 to over 200 higher ed institutions in the span of the past two years. Their unique approach focuses on elegant, discipline-specific assessment tools, such as molecular structure drawing, that triumph over generic multiple choice tools and outdated online homework.

The company was the winner of Inc. magazine's 2017 Coolest College Startup and the Student Startup Madness 2017 @ SXSW Interactive competitions. They won third place at the McGinnis Venture Competition 2017 @ Carnegie Mellon University. 101 was featured by CNBC, Inc., Cheddar, Royal Society of Chemistry, and Edtech Digest. They are based in New York City.

**AC Biode****The University of Cambridge | 2019 Competitor | www.acbiode.com**

AC Biode is developing the world's first-ever AC (Alternating Current) battery by "Biode", which has both the characteristics of Anode and Cathode. With offices in Tokyo, Japan and Cambridge, England, the company has won a number of competitions in the past 12 months, including the Monozukuri Hardware Cup 2020, Tech Briefs' Create the Future, and the Mitaka Business Plan Competition.

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

Acera Surgical is a bioscience company developing and commercializing a portfolio of fully synthetic electrospun scaffolds for regenerative medical applications. With technology licensed from Washington University, Acera's products exhibit a structure similar to native extracellular matrix (ECM) and thus support rapid and effective healing. The FDA cleared Acera's first product, Cerafix® Dura Substitute, in 2016 and its second product, Restrata™ Wound Matrix, in 2017.

Headquartered in St. Louis, Missouri, Acera raised a new equity round in October 2018.

**Active Energy Systems****Cornell University | 2018 Competitor | <https://www.activeenergysystems.com>**

Active Energy Systems is leveraging its scientific expertise to create and commercialize an enhanced form of ice thermal energy storage. Such an enhancement will not only further open up the current ice energy storage markets such as comfort cooling and natural gas plant cooling, but also help enable an upcoming form of electricity storage: pumped thermal energy storage.

**Adhesys Medical****Formerly Medical Adhesive Revolution | RWTH Aachen University, Germany | 2014 Competitor**

Adhesys Medical developed novel polyurethane-based medical adhesives. Their topical adhesive, CUTIS was designed for wounds and surgical incisions. Their biodegradable surgical sealant, VIVO was used internally to stop bleeding, seal wounds, and reinforce suture lines. It was the first hemostatic sealant that worked in a wet environment.

The company won the Rice Business Plan Competition in 2014 and MassChallenge Boston in 2016.

Adhesys announced its acquisition by the Grünenthal Group at the 2017 RBPC. Based in Aachen, Germany, Grünenthal is an entrepreneurial, science-based pharmaceutical company specializing in pain, gout, and inflammation.

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

Founded in 2014, Advano is a nanoparticle manufacturing and processing company that is applying fundamental chemical engineering principles to lithium-ion battery technology. 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 silicon nanoparticles that are more affordably made than those at the current market price.

Advano joined the summer 2017 cohort at Y Combinator and expanded into a 1,500 square foot facility at the University of New Orleans. Armed with a grant from the U.S. Department of Energy, Advano is partnering with the Argonne National Laboratory to create silicon nanoparticles for lithium-ion batteries.

**AeroShield Materials**Massachusetts Institute of Technology | 2019 Competitor | www.aeroshield.online

Cambridge, Massachusetts – based AeroShield manufactures porous glass insulation to enable cost-effective, energy efficient windows. They have been acceptance to Greentown Labs Incubator and into the Wells Fargo Innovation Incubator. The AeroShield team were a top 20 finalist in MassChallenge Boston and the National Grand Prize winner of Cleantech.

**Aerospec**Northwestern University | 2018 Competitor | www.aerospec.us

Aerospec Technologies is a data analytics group that integrates the latest drone inspection technology with artificial intelligence to facilitate the asset maintenance of renewable energy industry and accelerate the adoption of renewable energy. Lack of process automation and business intelligence in the asset management is costing the renewable energy industry increasingly more as the industry quickly develops. To solve this problem, Aerospec provides a turnkey solution that helps their clients to achieve 10x efficiency. This smart data analytics solution autonomously collects, analyzes and processes graphical data from drones with their proprietary computer vision algorithms, and delivers highly accurate utility issue detection and actionable field insights in minutes.

The Aerospec team consists of both aspiring young talents and industry veterans. They have established strong relationships within the industry and indexed over 1,000,000 solar panels on their platform as training data sets.

**Alleviant Medical**Rice University | 2017 Competitor | <http://alleviantmedical.com>

Alleviant Medical is developing next-generation devices to treat heart failure. They focus on providing symptomatic relief and improved quality of life for over 6 million patients suffering from this disease.

The technology was developed at the TMC Biodesign program. The company is based out of TMCx in Houston, Texas.

**Alva Motor Solutions**Norwegian University of Science and Technology | 2018 Competitor | www.alvaindustries.com

Alva Motor Solutions makes custom, high performance electric motors and generators available for everyone, by commercialising a novel production technology for electrical machines.

Having raised a seed round, they are applying for additional grant and have another investment round in the pipeline. The company is targeting first year of sales to the commercial UAV market in 2021.

**Ambiq Micro****University of Michigan | 2010 Competitor | www.ambiqmicro.com**

Ambiq Micro was founded in 2010 on the simple yet powerful notion that extremely low-power semiconductors are the key to the future of electronics. Through the use of pioneering ultralow-power technology, innovative companies around the world are developing differentiated solutions that reduce or eliminate the need for batteries, reduce overall system power and maximize industrial design flexibility. Ambiq Micro has developed breakthrough technology based on its patented Subthreshold Power Optimized Technology (SPOT™) platform that dramatically reduces the amount of power consumed by semiconductors, thus making its integrated circuits (ICs) an ideal solution for energy-critical applications.

Fujitsu Electronics markets the Ambiq Micro Apollo family of microcontrollers and real-time clocks in Europe and Asia. The Fossil Group uses Ambiq's microprocessor in a wide range of smartwatches from brands Fossil, Skagen, and Misfit.

Ambiq Micro was a finalist in the 2010 Rice Business Plan Competition and is based in Austin, Texas.

**Aqdot****University of Cambridge, England | 2013 Competitor | www.aqdot.com**

Aqdot is a Cambridge (UK)-based performance chemistry company with a focus and expertise in developing, licensing and selling novel proprietary products. At the core of the Aqdot is Aqbit, a novel and versatile performance chemistry that has exceptional capability at capturing, holding, and releasing materials. In unique and proprietary formulations, this chemistry has the potential to be game-changing in a wide range of industries, including household and personal care products, fragrances, industrial chemicals, agrochemicals, and pharmaceuticals. Identifying unmet needs in these sectors, Aqdot develops products that enable their 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. They won the Royal Society of Chemistry's Emerging Technologies competition in 2013.

The company is based in Cambridge, England and is funded, in part, by the United Kingdom's Royal Society of Chemistry. Company mentors hail from GlaxoSmithKline and Proctor & Gamble.

**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 backlighting 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.

In October 2016, Arctic Sand signed Wikeng as an Asian distributor and released their ARC2C0608 LED Boost for notebooks and tablets. This release will reduce power loss by half. A graduate of the North Shore InnoVentures' – incubator, Arctic Sand is headquartered in Cambridge, Massachusetts. They have a second design center in Santa Clara, California.

Japan's Murata Manufacturing acquired Arctic Sand in March 2017. Murata is an existing investor in Arctic Sand, leading a Series B round in 2016.

Are You a Human**University of Michigan | 2011 Competitor**

Are You A Human enables any website to be sure they are addressing a real human before serving content, services, or ads. Each day they analyze hundreds of millions of interactions across millions of websites to verify real human users and eliminate bots. Founded in 2010 with offices in Detroit and New York, Are You A Human are the foremost experts in online human behavior.

The company placed second at the 2011 Rice Business Plan Competition and has been featured in PC Magazine, VentureBeat, Rolling Stone, and Forbes and on CBS News (Detroit). The Detroit, Michigan, company counts automakers Chevrolet and Ford among its clients. In March 2016, the company sold their video platform, TruEngage to PK4 Media.

Are You a Human was purchased by Distil Networks in May 2017. Distil Networks is a global leader in bot detection and mitigation headquartered in San Francisco, California.

**Arovia****Rice University | 2016 Competitor | www.arovia.com**

Arovia make the world's largest ultraportable displays. The Houston-based company finished shipping all V1 products and will launch V2 later this year.

**Ascent Technologies****The University of Chicago | 2016 Competitor | www.ascentregtech.com**

Ascent Technologies is a RegTech firm that helps customers simplify and automate their regulatory compliance programs. Its IntaaS (Intelligence-as-a-Service) platform uses a proprietary vertical AI and automation processes to convert the rules and documents of a regulatory body into units of intelligence that are distributed to customers online. Ascent's RegTech products allow customers to automate their regulatory compliance function by helping them to identify, monitor, and manage their regulatory obligations, saving time and money and reducing regulatory risks.

Chicago-based Ascent has filed 14 patents and provisional patents. They recently completed a successful pilot for the Commonwealth Bank of Australia and ING, turning 1.5 million paragraphs of regulations into a series of actionable tasks. The Ascent team are using the funds from a March 2018 Series A to improve automation, swell the number of regulatory channels for their customers, and for additional hires.

**Astorian****Yale University | 2018 Competitor | www.astorian.com**

Astorian is an online marketplace that connects property managers and contractors for repair and maintenance work. It is being successfully used in over 900 buildings in New York City. The team is currently raising a seed round.

**Astrolabe Analytics****University of Washington | 2019 Competitor | www.astrolabe-analytics.com**

Astrolabe analytics provides a software solution for battery companies and their partners. we enable our clients to efficiently use their battery data to make batteries that work better, longer, and more reliably using a suite of cloud computing, data management, and machine learning techniques. Their initial product automates tedious battery data parsing, visualization, and statistical analysis. future development will focus on our maturing data management and data science toolkit. They are headquartered in Seattle, Washington.

**ATDynamics****Formerly Advanced Transit Enterprises | Dartmouth College | 2006 Competitor**

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, California, 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.

**Ateios****University of California, San Diego | 2018 Competitor | <https://ateios.com>**

Ateios provides conformal energy solutions, specifically flexible batteries for medical wearables and IoT. They aim to drive innovation to new heights that humanity has not yet seen in the world of conformal energy by changing the key limitation: the rigid battery.

**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 developing a new class of therapies to target and destroy cancer cells selectively. Its lead program, AU-011 in ocular melanoma (OM), is being developed under a CRADA with the National Cancer Institute.

AU-011 is a first-in-class targeted therapy in development for the primary treatment of ocular melanoma (OM), also known as uveal or choroidal melanoma, a rare and life-threatening disease. The therapy consists of viral nanoparticle conjugates that bind selectively to cancer cells in the eye. AU-011 has a necrotic mechanism of action and is administered through an intravitreal injection into the eye. Upon activation with an ophthalmic laser, the drug rapidly and specifically destroys the membranes of tumor cells while sparing key eye structures, which may allow for the potential of preserving patients' vision. In February 2017, the FDA granted Aura Biosciences IND clearance for their therapy targeting cancer cells in ocular melanoma. They successfully completed their Phase 2 trials in January 2019.

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 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, Massachusetts.

Avanti Metal Company**Harvard University | 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**

Avello Bioenergy provides renewable and profitable feed stocks for asphalt, fuel, chemical and soil amendment products through low-cost, thermal conversion of biomass. Avello Bioenergy's process converts biomass into several unique liquid fractions and biochar, using proprietary fast pyrolysis technology. Pyrolysis oil fractions are blended and/or upgraded into high quality and proprietary bioproducts, including Bio-fuel Oil™, Bio-asphalt™ binder, and renewable chemicals. Bio-fuel Oil™ has superior fuel properties compared to other bio-oils currently available.

**Avesta76 Therapeutics****Johns Hopkins University | 2019 Competitor | www.avesta76.com**

Avesta76 Therapeutics is developing novel therapeutics for treating many types of cancer. They recently brought numerous individuals onto their advisory boards who are very actively involved in their company's progress and development and also added several key partners to their team. Avesta76 is based in Pasadena, California.

**Aventus Orthopaedics****Formerly BOSS Medical | Johns Hopkins University | 2011 Competitor | www.avitusortho.com**

Aventus Orthopaedics Inc. is a medical device company developing novel instruments for minimally invasive surgery. 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. Aventus will provide the optimal bone grafting solution in order to improve the lives of its patients worldwide.

In 2016, The Aventus Bone Harvester was approved by the U.S. Food and Drug Administration. The company is launching a Series B round to foster sales in international markets. 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 University Development Technology Fund (TEDCO) and the NCIA.

Based in Baltimore, Aventus Orthopaedics was founded in 2011 by spine surgeons and biomedical engineers at Johns Hopkins University.

Bennu**Baruch College | 2010 Competitor | www.bennuworld.com**

Bennu is the leader in green social media marketing. Their sustainability solutions increase enterprise value by aligning clients' business objectives with consumer demand and environmental resources. Bennu's mission is greening the standard for a new lifestyle.

Headquartered in New York, their clients range from multinational corporations to startups that embrace business sustainability as a competitive advantage.

BetaGlide/retention.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.

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

**BioAesthetics**Tulane University | 2016 Competitor | www.bio-aesthetics.com

BioAesthetics was founded in 2015 as a Tulane University spinout with the mission to improve reconstruction options for breast cancer patients after they undergo mastectomies.

The BioAesthetics' initial product is a tissue-engineered nipple-areolar complex (NAC). This product will be provided to plastic and reconstructive surgeons as an off-the-shelf ready, acellular, NAC graft. During the breast reconstruction phase, after a mastectomy, the surgeon would engraft the NAC graft in position onto the patient's reconstructed breast. The patient's body would then use this NAC graft as a building frame to regenerate their own NAC. This patent-pending product is currently in the pre-clinical phase.

Headquartered in New Orleans, Louisiana, the company was selected for IndieBio, a San Francisco biotech accelerator. BioAesthetics is a National Science Foundation I-Corps company.

**BiologicsMD**University of Arkansas | 2010 Competitor | www.biologicsmd.com

Based in Fayetteville, Arkansas, BiologicsMD is developing novel therapeutics and therapeutic-device combinations for the treatment of hair-loss and bone disorders. The company's portfolio of hair cycle stimulators (HCS) are first-in-class treatments that hold the promise to restore hair and prevent hair loss in conditions of alopecia. The core technology relies on targeting physiologically active agents to Type I collagen found in skin and bone. BiologicsMD's targeted approach minimizes off-target effects and increases the time of exposure at the sites of function.

Grand prizewinner of the 2010 RBPC, Biologics holds two key patents and is funded in part by a grant from the U.S. Department of Defense. BiologicsMD is a VIC Technology Venture Development™ portfolio company.

**BioLum Sciences**Southern Methodist University | 2015 Competitor | www.biolumsciences.com

BioLum Sciences is the developer of the BioSense AMD (pending FDA clearance). The BioSense AMD is a point-of-care, low cost device that works with their proprietary biomarker technology to analyze airway inflammation in real time. Their technology will provide doctors with invaluable information to better treat individuals with respiratory conditions such as asthma and COPD.

A current resident of Johnson & Johnson Innovation's JLABS@TMC in Houston, Texas, the company won the Michael E. DeBaKey Memorial Life Science Award at the 2018 Texas Life Science Forum.

BlackLocus

Carnegie Mellon University | 2011 Competitor



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.

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.

**BLUEWAVE**Formerly Ivy Creative Labs | University of Florida | 2016 Competitor | www.bluewave.tech

BLUEWAVE Technologies makes a water free, detergent free, and chemical free ozone infusion device to treat orthotic and prosthetic and other healthcare items to revolutionize the quality of the work environment and patient satisfaction.

**Bold Diagnostics**Northwestern University | 2016 Competitor | www.boldiagnostics.com

Bold Diagnostics is a medical device company developing an intelligent, diagnostic platform for blood pressure monitoring. They are designing a comfortable monitoring system provides patients with their blood pressure trends. The comprehensive reports generated by Bold's system will be seamlessly uploaded to a patient's electronic medical record (EMR), allowing clinicians to have honest conversations with their patients about their actual cardiovascular disease risk while comfortably integrating into a patient's everyday life.

Bold was created within Northwestern University's Center for Device Development Graduate Fellowship Program (CD2). The company is managed by a well-qualified team of engineers, clinicians and entrepreneurs, with extensive business and medical device experience.

After finishing fourth at the 2016 RBPC, Bold was awarded a Small Business Innovation Research Phase I Research grant from the National Science Foundation to finance a next phase prototype. They placed third in the Phillips Wearables Challenge in 2017. Headquartered in Chicago, Illinois, they have an exclusive license with Northwestern University and have two patents on file.

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

Boomalang is a video platform and team of international language coaches. They connect high school and university students of Spanish, French, or English to native speakers across the world to improve conversational fluency and intercultural competence through live video chat. With subtly guided conversation and peer encouragement, Boomalang simulates a natural language learning experience with a focus on teacher and student-specific interests in a low-anxiety environment.

In addition to promoting intercultural competence and global citizenship for learners, Boomalang also provides students and young professionals across the world with favorable and flexible employment opportunities.

Boomalang is an alumnus of the Jumpstart Foundry Technology Accelerator, SEC Symposium, AWS EdStart, and the NYU StartEd Incubator. 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. They are based in Nashville, Tennessee.

**BrewBike**Northwestern University and University of Chicago | 2019 Competitor | www.brewbikecoffee.com

BrewBike provides college students coffee in the most convenient way, every day. They serve cold brew coffee at lean retail locations and through wholesale accounts. And by empowering students to launch BrewBike at their schools, they will dominate college campuses across the country, leaving big barriers behind them.

After placing sixth at the 2019 RBPC, BrewBike is now launched at four colleges in three states, with many more on the way. They have sold over 100,000 cups of coffee.

**BriteSeed****Northwestern University | 2013 Competitor | www.briteseed.com**

BriteSeed 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.

The company was born out of the 2011–2012 NUvention at Northwestern University. They have been featured in the Chicago Tribune, FORTUNE, Tech Cocktail, Crain's Chicago Business and the Chicago Sun-Times. Since the RBPC, BriteSeed has developed and validated industry-leading surgical imaging technology that employs artificial intelligence to help make operations safer and faster. This technology development will be available to operating rooms in early 2020.

The company is one of the ten U.S. laureates of the 2018 Yei Start in France accelerator. BriteSeed placed second in the 2013 Rice Business Plan Competition.

**C3Nano****Stanford University | 2010 Competitor | www.c3nano.com**

Founded in 2010 as a spinout from Stanford University, C3Nano is an advanced materials company focused on developing new materials and chemistries for a wide range of electronic applications. C3Nano's investors and partners include GSR Ventures, Nissha Printing Co., Ltd., Phoenix Venture Partners, Hitachi Chemical, Lens Technology, Nagase America, and several undisclosed investors, including a top global mobile and internet technology company headquartered in Silicon Valley.

C3Nano's funding rounds have enabled the company to quickly achieve best in class ink formulations and expanded production capabilities. They have a total of 20 patents in their portfolio, including 13 international patents issued in 2018. An additional 45 patents are pending. C3Nano is headquartered in Silicon Valley with an industry leading manufacturing base in Korea.

**CalWave Power Technologies****University of California, Berkeley | 2013 Competitor | <http://calwave.org>**

CalWave Power Technologies provides a solution to harness the renewable power of ocean waves to produce electricity and freshwater. CalWave's patented Wave Energy Converter (WEC) is moored offshore, simple and scalable. Their initial shallow water approach was inspired by the ability of a muddy seafloor to effectively absorb over passing ocean waves within only a few wavelengths. Their patented solution operates submerged, allowing it to survive stormy seas while causing no visual pollution or posing any collision danger.

Supported by grants from the National Science Foundation and the Small Business Voucher Program, the company is collaborating with experts from UC Berkeley and Sandia National Laboratories and with marine technology experts from the University of Washington & the Applied Physics Laboratory as a sub-awardee under the Naval Facilities Engineering Command Marine and Hydrokinetic Energy Advancement program. The U.S. Department of Energy awarded CalWave a three year, multi-million dollar support package to demonstrate CalWave's award winning technology in the open water.

Forbes named CalWave's project lead, Marcus Lehmann, to the 2016 list of 30 Under 30 in Energy. CalWave won second place for the Wave Energy Prize awarded by the U.S. Department of Energy in 2016. CalWave is currently part of the Cyclotron Road program at Lawrence Berkeley Laboratory.

**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

CaptainU helps millions of athletes compete at the next level. CaptainU was founded in 2008 by Avi Stopper & Michael Farb at the University of Chicago, and has offices in Denver, Colorado and San Francisco, California. The CaptainU platform provides athletic development and recruiting tools for millions of athletes, youth and club teams, events and college programs.

The company 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.

In December 2016, Captain U was acquired by Blue Star Sports. Based in Frisco, Texas, Blue Star manages youth sports through its platform for youth leagues, clubs, associations and their national governing entities. As part of the merger, RBPC alumni Avi Stopper and Michael Farb will step into executive roles at Blue Star Sports while continuing in their existing roles as CaptainU's CEO and COO.

**Catalight**
University of Waterloo | 2019 Competitor | www.catalight.ca

Catalight believe that everyone shares in the same basic human right to a standard for health and well-being and that without access to safe drinking water, this right cannot be met. At CataLight, our goal is to make safe drinking water accessible for all. To achieve this goal, CataLight is building a new kind of point-of-use water filter that incorporates proven electrochemistry into an intentionally simple and proprietary product design.

In 2019, they joined the Accelerator Centre as a part of AC JumpStart Program Cohort 9. They came in seventh at the 2019 Rice Business Plan Competition.

**CatheCare**
Columbia University | 2018 Competitor | www.cathecare.com

CatheCare's mission is to eliminate CRBSIs in the United States and the world. To this end, they seek to achieve several goals: efficacy, safety, and ease-of-use. They have developed CASS (CatheCare Sterilization System), a first-of-its-kind, attachable device that eradicates 99.9% of bacteria, continuously sterilizes even during line access, and does not contribute to bacterial resistance.

New York-based CatheCare is a unique, compatible, and easy-to-use device that save lives.

Cemsica

University of Pennsylvania | 2016 Competitor

Cemsica is developing a novel low-cost carbon capturing technology for energy industry. This technology will have a large advantage over currently available commercial technologies by providing a 55 percent cheaper alternative that demonstrates enhanced performance and reduced energy consumption.

Cemsica's research was a major payload on a 2018 resupply mission to the space station. The technology separate CO₂ gas molecules from air and other gasses ultimate goal of reducing greenhouse gas emissions was highlighted in the U.S. National Laboratory blog: https://youtu.be/_6g zr9BiAc.

Cemsica is a Wharton Venture Initiation Program portfolio company and a finalist at the 2017 CleanTech Challenge.



Citrine Informatics

Formerly Big Science | Stanford University | 2013 Competitor | www.citrine.io

Citrine Informatics is the leading materials informatics platform. Their technology accelerates the development of materials and chemicals using the power of materials data combined with artificial intelligence (AI). Citrine is backed by leading investors including Tencent Holdings, B&C Holdings, Innovation Endeavors, DCVC (Data Collective), Prelude Ventures, AME Cloud, XSeed Capital, Morado Ventures, and Ulu Ventures.

In October 2017, Founder and CEO Greg Mulholland was invited to address the U.S. House of Representatives Caucus on Manufacturing regarding the future of materials and product design. Additionally, Greg was recognized in Forbes' 2015 list of 30 Under 30 in Energy. Citrine is based in Redwood City, California.



ClearCam

The University of Texas at Austin | 2018 Competitor | www.clearcam-med.com

ClearCam is dedicated to providing clinicians with innovative tools and technologies that maximize their vision and skill in the Operating Room.

The ClearCam Kelling Laparoscopic Cleaning System was granted 510(k) clearance from the US Food and Drug Administration in February 2020. A few months later, the team raised a second seed round. In 2019, they were named a [top 50 startup in the world](#) and won the University of Texas [Health Innovation award](#). They are based in Austin, Texas.



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 2014, ClearCount was acquired. Details concerning the sale have been kept confidential.

**Colonai****Columbia University | 2019 Competitor | <http://colonai.com>**

Colonai is developing artificial-intelligence-enabled solutions to assist physicians in detecting and removing colorectal tumors, thereby addressing the two leading causes of interval colorectal cancer.

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

CorInnova is developing a non-blood contacting cardiac assist device for the treatment of acute heart failure syndrome. By treating patients in eligible for existing devices, CorInnova can expand the market by 50 percent, from \$4 billion to \$6 billion.

The company has completed 23 one-day large animal studies (in sheep) demonstrating ability to deliver device minimally invasively (100 percent success, 55+ times), ability to increase cardiac output by 50 percent, decrease end diastolic pressure & enhance filling. [4Q-2019]; a pneumatic driver for long-term animal studies [4Q-2017], thier conceptual design for pneumatic driver for human use [Q1-2018], a pilot 5-day large animal safety study with excellent results [Q1-2018] , two pediatric POC studies in goats [Q2 2018], improved their implantable device for longer term animal large animal studies with 8X safety factor (60 days' durability for 7 day use). [Q2-2019], and most recently, their proof of concept studies for diastolic heart failure in large animal model [Q3-2019].

Their competitions and awards include London's Wellcome Trust Translation Fund Award in 2014, the Top 3 Investment Potential for All Industries honorary award from Chicago's Angel Capital Association in 2019; First Place at the 2019 MedCity INVEST Pitch Perfect Competition, held in Chicago; a Most Promising Texas Life Science Company at the Texas Life Science Forum in 2019, 2017, and 2015; the Society for Thoracic Surgeons Tech-Con 2020 Shark Tank Second Place in New Orleans; First Prize, Innovation RESI (Redefining Early Stage Investments) in San Francisco, 2018; Second Place at 2018 Health Tech Austin Med Dev Conference in Austin.

They have received funding from funding and grants from the National Science Foundation, the National Institutes of Health, and the TMC Venture Fund. CorInnova participated in the fall 2018 cohort at gBETA Medtech, Minneapolis, MN, sponsored by Boston Scientific and the TMCx Medical Device Cohort X9. The company is a resident of Johnson & Johnson Innovation's JLABS @ TMC in Houston, Texas.

**Curenav****University of Houston | 2019 Competitor | www.curenav.com**

Curenav's mission is to help solve the greatest pains of cancer patients – the need to know what is going on in their bodies, what they can do about it, and what their best chance of success looks like – and use this knowledge to reduce cancer mortality for everyone dealing with this disease today and in the future. With incidence rates increasing, cancer affects virtually everyone and Curenav understands the journey of patients and how critically important it is to find answers to the questions that remain unanswered. The team has issued their Beta Release and is in pilot negotiations with major medical providers.

**cycleWood Solutions****Formerly cycleWood Plastics | University of Arkansas | 2011 Competitor**

Using their patented technology, cycleWood Solutions modified lignin, an abundant, natural byproduct of the paper manufacturing process, and blended it with other compostable polymers to create their signature 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. They placed fourth in the 2011 Rice Business Plan Competition.

The cycleWood technology was sold to CAPCOR in 2016.

**Cytex Therapeutics****Duke University | 2006 Competitor | <http://cytextherapeutics.com>**

Cytex Therapeutics is Cytex is a mid-stage startup focused on developing regenerative medicine therapies for orthopaedic conditions.

Cytex has received several new patents, as well as funding from Phase II National Institutes of Health SBIR grants. Additional funding and support has been provided by the North Carolina Biotechnology Center, the National Science Foundation, and NC IDEA and by the Duke StartUp Challenge. Cytex is headquartered in Durham, North Carolina.

**D-Orbit****Santa Clara University | 2010 Competitor | www.deorbitaldevices.com**

D-Orbit provides space logistics, orbital transportation, in orbit servicing and space waste management services to traditional and commercial satellite operators First mover in space debris solutions, first mover in orbital transportation for small satellites.

The company is currently one of the leading commercial space companies in Europe, with customers in three continents. They continue to grow with almost 40 satellites booked for launch and services. They have press coverage at the global level, including Space News, Forbes, Japan Times, and more.

Based in Milan, Italy, the company has additional offices in Portugal, the United Kingdom, and the United States.

**D&P Bioinnovations****Tulane University | 2016 Competitor | www.dpbioinnovations.com**

D&P Bioinnovations is a regenerative medicine company focused on repairing damaged organs with unique biomaterials and immunomodulatory stem cell factors. They have developed a novel, off-the-shelf" implant to regenerate damaged organs. The company's first therapeutic approach is to regenerate a damaged esophagus to treat esophageal cancer.

In February 2018, the company relocated to Nashua, New Hampshire after winning the 2017 Flatley Challenge. The award included office and lab space at the Nashua Technology Park @ Gateway Hills. D&P Bioinnovations was a MassChallenge finalist and won the Greenburg Traurig Award at Mass Innovations.

**DaStrong****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.

With their core patents granted in China, Taiwan and the United States, DaStrong is in production, providing thermal solutions to world-leading 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. Data that can be used for a wide variety of business applications like lead generation, pricing intelligence and competitive analysis.

Datafiniti's exhaustive yet scalable data collection and quality control process provides customers with industry-leading coverage and accuracy. They help 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**

DATTUS provided 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. DATTUS' customers included Faurecia and Wabash National. Dattus Founder Anurag Garg was recognized on Forbes 30 Under 30 in 2017 (Manufacturing & Industry).

The company was acquired by Plex Systems of Troy, Michigan in July 2018. Plex is the Manufacturing Cloud, delivering industry-leading ERP and manufacturing automation to nearly 600 companies across process and discrete industries.

**DC Energy Systems****Auburn University | 2017 Competitor | www.dcennergysystems.com**

DC Energy Systems electronic power distribution panels deliver a process that allows for monitoring, regulating, switching, and controlling of low voltage direct current commercial power. The system adheres to strict National Electrical Code regulations for design and installation as it gives the ability to blend with current electrical wiring methods and solar integration with the elimination of DC/AC power inverters and adaptors.

Their distribution system will expand direct current markets and direct current usage with existing and potential uses in personal devices, lighting, appliances, renewables (electric vehicles & storage), telecommunications, data centers, and IT networks. The system enables competitiveness within the market alongside AC energy companies and solves a need for a safe low voltage commercial DC power distribution panel for controlling and switching DC voltage that was lacking in the consumer market.

DC Energy has two approved utility patents and was one of seven finalists in the 2017 Global Business Challenge held in Brisbane, Australia. The company headquarters in Alexandria, Virginia.

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

Headquartered in suburban Baltimore, Maryland, DDMotion's products are based on Key's invention of the Transgear™ gear assembly. When applied to a machine, the three-variable control converts constant input to variable output or variable input to constant output. The major benefits of the invention, when applied to automotive products, are increased fuel efficiency, reduced cost, scalability, and ease-of-use for the consumer. The application to renewable energy, the run-of-the-river turbine will harness more energy at a lower cost than hydroelectric dams, wind or solar and with very little negative impact on the environment.

The company holds an array of patents on its innovative variable motion controls. DDMotion is supported in part by the Maryland Industrial Partnerships Program and the Maryland Technology Development Corporation.

**Delta Band****Carnegie Mellon University | 2019 Competitor | www.deltatrainer.fit**

Pittsburgh-based DeltaTrainer is a mobile and smartwatch platform that delivers a full personal training experience for just \$100 per month. We have built powerful tracking and motion analysis technology for the Apple Watch that allows us to offer accountability, live feedback on form/tempo, and completely adaptive workouts. Our real personal trainers use this live feedback in conjunction with our suite of trainer tools to deliver an experience that makes clients feel like their trainer is right there with them in the gym – something no other personal training company has achieved.

**Dermadiagnostics****Notre Dame | 2019 Competitor | www.dermadiagnostics.co**

Dermadiagnostics is a medical device company developing and commercializing a diagnostics patch for cervical cancer prevention – diapatch™. A noninvasive, wearable patch that allows doctors, healthcare professionals, and people to appropriately test for high-risk biomarkers leading to the rise of malignant gynecologic cancer health. A NSF I-Corps grant allowed the company to find product market fit in the area of gynecologic oncology and to define the regulatory strategy. Additional funds supported further milestones of the IP portfolio. The team has obtained designs and quotes from a supplier for the MVP. Currently, dermadiagnostics is establishing the correct collaborations at the University of Notre Dame and with local health systems, physician groups, and key opinion leaders to pilot the diapatch MVP.

They are headquartered in South Bend, Indiana.

**DexMat****Rice University | 2015 Competitor | <http://dexmat.com>**

DexMat manufactures high performance fiber and film products made from carbon nanotubes (CNTs) for a new generation of consumer and commercial applications. Their products are primarily being developed for applications in the aerospace, automotive, and wearable technology industries.

The company tripled their total sales from 2019 compared to 2018 and also increased production capacity by a factor of 3 in 2019.

Forbes named co-founders Dmitri Tsentlovich and Francesca Mirri to their 2016 list of 30 Under 30 in Manufacturing and Industry. DexMat was awarded Phase II SBIR grants from both NASA and the U.S. Air Force. The Houston-based company placed fifth overall in the 2015 RBPC.

**Diagenetix****University of Hawai'i | 2011 Competitor | <http://diagenetix.com>**

Honolulu-based Diagenetix develops mobile, accurate, gene-based (molecular) diagnostic technologies. By enabling diagnostics outside of a centralized lab, they help industries and people more quickly prevent or minimize the spread of harmful pathogens and diseases.

Improving upon the company's original Smart-DARTTM 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. Currently, the device is used by research communities, federal agencies and agricultural producers and processors for on-site detection of microbial contamination and diseases.

In January 2017, the company's Smart-DART Platform for portable molecular diagnostic screening was acquired by Douglas Scientific. The company's original DART technology was originally developed for the detection of select agricultural agents and funded by the United States Department of Agriculture. Their technology has caught the eyes of media outlets such as The Wall Street Journal, TechCrunch and AlleyWatch.

Currently Diagenetix is working on developing the web-based dashboard system and cloud server to manage their customer's test data generated by BioRanger.

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

Disease Diagnostic Group (DDG) is a medical device company specializing in screening, tracking and diagnosing highly infectious or neglected tropical diseases through portable and reusable devices. Its flagship product is RAM (Rapid Assessment of Malaria).

DDG was founded in 2012 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. 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 Boston, Massachusetts, Buffalo, New York and London, England, DDG is the recipient of numerous grants and awards including Launch NY, the MIT \$100K Pitch Competition and the Harvard Life Science Accelerator. They have been featured in media outlets including CNN Money, The Boston Globe, The New York Times and The Plain Dealer.

Founder John Lewandowski was named to Forbes' list of 30 Under 30 in the social entrepreneur category in January 2017.

**Divert****Formerly FEED Resource Recovery | Babson College | 2007 Competitor | www.divertinc.com**

Divert creates innovative and efficient solutions toward eliminating waste from the retail industry. They help retail supply chains realize a smaller cost (or see a greater return) on resource recovery efforts, from trackable food waste bins to organics backhauling; from energy generation to innovative solutions for untapped opportunities like waxed cardboard.

Through innovative technology and custom-designed solutions, Divert brings accountability to retail recycling operations worldwide. Their flexible tools integrate seamlessly into existing workflows, helping customers exceed diversion goals, report on individual store performance and save money, all while making a real, lasting environmental impact.

The company's first completed project was a clean energy production system for Kroger's Compton, California, distribution facility. Divert is based in Concord, Massachusetts.

**DMF Medical****Formerly Purisorb | Dalhousie University | 2011 Competitor | www.dmfmedical.com**

DMF Medical Incorporated was founded with the sole purpose of making anesthesia safer. The company's lead product – memsorb - will be the next generation in CO2 removal for anesthesia circuits. Their patented technology uses membrane separation technology to remove CO2, rather than a traditional chemical reaction. This device will provide a game changing solution to the known dilemma associated with current chemical CO2 absorbers, and aims to provide safer anesthesia, protect the environment and save money.

memsorb is currently under development and is not yet commercially available. DMF's funding comes in part from the Atlantic Innovation Fund. They are headquartered in Halifax, Nova Scotia.

**Dough****University of Michigan | 2019 Competitor | www.dough.com**

Equal parts brokerage, education, and media company, dough is what investing should be: unlimited commission-free stock trading, zero account minimums, and iOS and Android apps filled with smart ideas. Our mission is to inspire the world to embrace risk, take control of their money, and make more of it.

Investing in securities, ETFs, and ETNs, involves risk, and there is always potential of losing money when you invest. dough does not provide investment, tax, or legal advice.

**Droice Labs****Columbia University | 2017 Competitor | www.droicelabs.com**

Droice Labs is an AI company specializing in understanding real-world clinical data to help physicians provide better care to their patients. Droice Labs uses novel Natural Language Understanding (NLU) methods while working with some of the largest hospital systems, health insurance companies, life sciences companies, and government bodies across the United States and Europe.

They placed fifth place in 2017 RBPC and are headquartered in New York, New York.

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

Dynamics has three business units – an intelligent card, value-added processing, and phone payment technology business unit. The company's intelligent card division has introduced market defining card products such as the world's first multiple account card (Canada), the world's first password protected card (Asia), and the world's first multiple co-brand card (USA). The company's value-added processing division provides real-time loyalty or purchase notification to millions of consumers and includes customers such as Tim Hortons and the Upper Deck Company. They also produce pay-by-phone technology that is used in cell phones. LG Electronics leverages Dynamics technology in LG Pay.

Dynamics has raised over \$110 million dollars in funding from investors including Mastercard, CIBC, Adams Capital Management, and Bain Capital Ventures. Dynamics operates multiple manufacturing facilities, physical card personalization, and remote data trusted service manager (TSM) facilities, with its Global Headquarters in Pittsburgh, Pennsylvania, APAC headquarters in Singapore, LATAM headquarters in Sao Paulo, Brazil, and EMEA headquarters in New York.

Dynamics placed first in the 2009 Rice Business Plan Competition.

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

Houston-based Dynamo Micropower provides upstream O&G with remote power utilizing hybrid gas turbine technology to deliver power that is lower cost, more reliably, and higher quality. Their turbines operate on liquid and gaseous fuels, power artificial lift without loss in power quality, and only requires annual maintenance. Dynamo is entering the market with a 50HP turbine and has currently booked 18 turbines for the year. Customers benefit by reducing their overhead and lease operating expense.

Micropower is funded by a Small Business Innovation Research grant from the National Science Foundation and by the U.S. Department of Energy.

EcoLight

Formerly Cirquility/House | 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

EEme was an energy analytics company providing a scalable machine learning platform that converts raw smart meter data into appliance-level and equipment-level insights using proprietary algorithms. It provided demand-side management stakeholders with appliance-level insights leveraging existing smart meter data and without relying on new hardware investments or user intervention."

In January 2019, EEme was acquired by Tendril, the leading provider of Home Energy Management solutions to the utility industry. Details of the sale were not disclosed.

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

Elegus Technologies is commercializing nanotechnology enabling safer, longer-lasting batteries. Their aramid-based, ultra-strong battery separator made from high-performance nanoscale fibers was developed at the University of Michigan.

With significant support from the likes of the University of Michigan, MEDC and the National Science Foundation I-Corps program, Elegus has continued to develop its patent-pending battery separator technology. The company headquarters in Ann Arbor, Michigan.

**Elevate K-12****Formerly Elevate Learning | University of Michigan | 2007 Competitor | www.elevatek12.com**

Elevate K-12 is passionate about creating high-quality teaching and learning opportunities for teachers and students. We are on a mission to make zip code free teaching available to all students, irrespective of where they live. Schools and districts partner with Elevate K-12 for high-quality live, online instruction.

Elevate K-12' has new offices in their Chicago, Illinois headquarters and in Mumbai, India.

**EnKoat****Arizona State University | 2019 Competitor | www.enkoat.com**

EnKoat develops and engineers coatings into energy storage systems to improve the energy efficiency of commercial and residential buildings. They are based in Casa Grande, Arizona.

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

essDOCS enables paperless trade. Its solutions digitize and automate paper-heavy processes, including: online creation / approvals of all export docs (CargoDocs DocPrep+), data extraction and structure from paper docs and back-office automated checks (CargoDocs Auto-Document Processing), end-to-end eDocs management for key trade docs such as electronic Bills of Lading and Warehouse Warrants (CargoDocs DocEx) and application/issuance of electronic Certificates of Origin (essCert).

Over 37,000 companies, ranging from 31% of the Fortune Global 100 to innovative SMEs, use essDOCS solutions across 203 countries. The company is headquartered in St. Julian's, Malta.

**Eventigrate****The Katholieke Universiteit Leuven, Belgium | 2016 Competitor | www.eventigrate.com**

Eventigrate is a multi-event solution bringing context- and location-based information to every stakeholder of an event. Real-time and post-event analytics offer relevant insights enabling the event organizer to optimize his event, exhibitors to generate new leads for their company and attendees to network more efficiently.

Since competing in the 2016 RBPC, Eventigrate has been nominated as Student Startup of the Year and competed in the finals of Bizidee. They are headquartered in Heverlee, Belgium.

**EximChain****Massachusetts Institute of Technology | 2016 Competitor | <http://eximchain.com>**

Eximchain is pioneering a scalable, public blockchain with privacy for enterprise supply chain applications. The company enables businesses to connect, transact, and share information more efficiently and securely.

Eximchain Smart Contracts allow banks to verify the validity of orders placed with all upstream partners and suppliers and provide the necessary financing. They securely record historical data and transactions allowing suppliers to prove their reliability to buyers and rating institutions. Eximchain's tools enable partners to seamlessly share demand and inventory information across a common ledger. The company is based in Singapore.

**Farapulse****Formerly IOWA Approach | The University of Iowa | 2014 Competitor | <http://farapulse.com>**

Farapulse is a medical device company developing a portfolio of innovative catheter-based systems to address a range of arrhythmias. While their priority focus is Atrial Fibrillation, eventually they will broaden their pipeline to address other arrhythmias where PFA can significantly reduce the risks of ablating near critical cardiovascular structures.

They headquarter in Iowa City, Iowa.

Fifth Season**Formerly RoBotany | Carnegie Mellon University | 2017 Competitor | www.fifthseasonfresh.com**

RoBotany is a robotic indoor vertical farming company transforming modern indoor agriculture with automated robotics and software analytics. Their patent-pending technology improves labor efficiency and crop output while also providing an unprecedented level of data analysis for optimization from seed to harvest. In summary, our smart indoor farms deliver perfect, pure produce no matter the season or location.

Currently they have one public produce brand named Pure Sky Farms that is being sold in Whole Foods in Pittsburgh, Pennsylvania.

**Flat Medical****National Taiwan University, Taiwan | 2016 Competitor | www.flatmedical.com**

Flat Medical, established in May 2015, is designing innovative medical devices to prevent the accidental punctures during different kinds of injections. With their auto-locate and anti-puncture technology, they can reduce the high risks and costs related to serious side effects without a change of doctor's habit.

Currently, the company is establishing the ISO 13485 system, CER and FDA submission documents. They expect their first product, EpiFaith, to get FDA 510(k) clearance and CE mark in the fourth quarter of 2018. Flat Medical presented a paper at the American Society of Anesthesiologists's 2017 annual meeting; their product was praised by anesthesiologists from Harvard, MGH, and the Cleveland Clinic. They are preparing for clinical trials in the U.S. and looking for U.S. advisors to assist in the trials.

They are based in Taiwan.

**Fluency Lighting Technologies****University of California, Santa Barbara | 2015 Competitor | www.fluencylighting.com**

Fluency Lighting Technologies is working to create next-generation, low-étendue light sources for highly efficient and flexible design illumination, using laser technology and materials design. Their goal is to provide ultra-efficient light sources, surpassing the limitations of current lighting technologies, and ultimately leading to new functionalities from the traditional light bulb.

Their speciality lies in designing light sources for applications that require high control of the output light and a small footprint. This includes tactical flashlights, automotive, aircraft, projector and display, medical device illumination, architectural spotlighting, entertainment spot lighting, and museum and retail downlighting. The company's technology enables their customers to implement innovative, cutting-edge technology in their products, driving up sales, and becoming leaders in their market.

In 2018, Fluency Lighting was awarded a National Science Foundation (NSF) Small Business Innovation Research (SBIR) Phase II award and were accepted into the Cleantech Open Accelerator. Fluency Lighting Technologies is located at the Impact Hub in downtown Santa Barbara, California.

**Fluid-Screen****Yale University | 2015 Competitor | www.fluid-screen.com**

A spinout of Yale's Reed Lab, Fluid-Screen has developed a revolutionary bacterial detection system for quality assurance testing for municipal water supplies, medical applications and food processing. Fluid-Screen's patent-pending, portable device produces test results in about 30 minutes with over 99 percent accuracy.

In the midst of its research phase, Fluid-Screen has three current pilots: two at major pharmaceutical companies with the third focusing on environmental applications. This last pilot uses grant funding from the Massachusetts Clean Energy Center to test water at beaches, lake and rivers to determine whether they are safe for recreation.

The company has received accolades from NASA and won the Grand Prize in NASA's Create the Future Design Contest, a Gold Award from the MassChallenge Accelerator and the M2D2 Becton Dickinson Award. Fluid-Screen is based in Cambridge, Massachusetts.

**Flux Marine****Boston University | 2019 Competitor | www.fluxmarine.com**

Flux Marine designs, markets and manufactures electric marine propulsion systems. Owning a boat encompasses high maintenance costs, low reliability, disruptive noise and pollutive emissions. Our systems offer limited maintenance, increased reliability, zero emissions and the equivalent range of a comparative gas system.

In the past year, they were the Northeast Region winner of the Cleantech Open and won Wye Island Challenge - a 24 mile electric boat race - against commercial competitors. The team were the National Runner-up, Best in showcase, People's Choice Award of the Cleantech Open. Flux Marine has secured their first paid pilot.

**FocalCast****Marquette University | 2014 Competitor | www.focalcastapp.com**

FocalCast is a leading unified communications platform that allows users to initiate unlimited collaboration on documents, whiteboards, live annotation and recordings.

The company's web-based platform enables seamless collaboration across all types of internet-connected devices including smart phones, laptops, tablets, touch displays and PC's without downloads or plugins. FocalCast can be accessed from any device and run securely as an on-premise installation.

In 2017, Focalcast began to partner with Qumu, to add real-time collaboration to Qumu's recording and streaming services. Alumni of the Capital Innovators Accelerator program, the company received the 2016 Arch grant.

FocalCast is used in corporations and higher-education institutions across the United States with headquarters in St. Louis, Missouri.



Forest Devices

Carnegie Mellon University | 2017 Competitor | www.forestdevices.com

Based in Pittsburgh, Pennsylvania, Forest Devices is developing AlphaStroke (AS), the first stroke screening device that can be used by all medical personnel in any environment.

Durable, portable, and easy to use, AS alerts users to possible strokes within minutes. By triaging of stroke and stroke negative patients to the correct level of care, AS dramatically reduces the average delay of 110 minutes that 50% of stroke patients experience. This minimizes time-to-treatment, the critical factor in improving stroke patient outcomes.

Since winning the grand prize at the 2017 RBPC, Forest Devices closed a seed round and secured investment from Pittsburgh Life Sciences Greenhouse. They were named the Pittsburgh Tech Council Startup of the Year Finalist and one of the Top 500 Startups Worldwide by HelloTomorrow. The TMCx Accelerator graduates rang the closing bell at Nasdaq in September 2017.



Formally

Brown University | 2019 Competitor | www.formally.us

Formally an intuitive form-filler for immigration papers. It is designed to guide displaced people through applications for asylum, visas, and citizenship. We believe in breaking bureaucratic barriers to make our world more accessible. Formally deconstructs forms into their base parts and reorders, groups, and explains these parts into a translated question flow that avoids confusion, provides examples, and warns of risk. They are based in Providence, Rhode Island.



Four Growers

University of Pittsburgh | 2018 Competitor | <https://fourgrowers.co>

Four Growers was founded to provide healthy, affordable, local produce by reducing the production costs of greenhouse growers through robotics technology. They are positioning themselves to be the automated solutions provider for greenhouse crop management.

The team is working closely with various greenhouse growers to develop a tomato harvesting robot. Their technology relies on two layers of protection, patents filed protecting the physical design of the robot and a proprietary algorithm that controls the robot's decision making. Four Grower's solution is not only capable of harvesting the tomatoes, but also of performing a quality check and of packaging.

The August 2018 graduates of Y Combinator has been awarded prize money from Atlantic Coast Conference as part of the ACC InVenture Prize and from University of Pittsburgh Innovation Institute as part of the Randall Family Big Idea Competition. Four Growers is based in Pittsburgh, Pennsylvania.

FRED

University of Pittsburgh | 2018 Competitor | <http://fred.publichealth.pitt.edu>

FRED (A Framework for Reconstructing Epidemiological Dynamics) is an open-source software system for modeling infectious diseases and control strategies using census-based populations developed by the Pitt Public Health Dynamics Laboratory. FRED represents every person in a real geographic region as a separate individual each with her/his own unique social, familial, demographic, behavioral, and health characteristics. Individuals interact within realistic household, school, and workplace social networks.

FRED was originally developed to simulate infectious disease epidemics but has been extended to enable users to model a wide range of health conditions and to study how patterns of those conditions vary over time in a specific region. It is available through a web interface to make large-scale agent-based models more useful to the policy-making community, the research community, and as a teaching tool for students in public health.

In October 2018, they received a two year grant from the Centers for Disease Control to use FRED's modeling and big data to test approaches to the opioid crisis.

**Fruitdee****Formerly AGcerez | Chulalongkorn University, Thailand | 2013 Competitor | www.fruitdee.com**

Fruitdee is a provider of provider of processed Thai fruit; frozen, dehydrated, and organic herbs. In addition to supplying one of the largest food conglomerates in Thailand, Fruitdee is rapidly expanding into the China market.

**Gecko Robotics****Carnegie Mellon University | 2016 Competitor | www.geckorobotics.com**

Gecko Robotics performs robotic inspections for energy and cogeneration plants across the United States. They build and operate robots to perform inspections on industrial equipment, specifically coal, biomass, natural gas and recovery boilers as well as storage tanks and piping.

Gecko's robots eliminate dangerous working conditions by removing humans from confined and inaccessible places. Inspections are completed in a fraction of the time and cost compared with traditional methods. Inspected areas are evaluated in real-time with best practice inspection methods such as ultrasound, magnetic induction and visual, enabling plant managers to quickly know where and how to make targeted repairs.

The Pittsburgh-based company recently opened up two new offices in Texas, experienced a 133 percent employee growth, and had three major company releases including the TOKA 4 robot, Web Portal 3, and a new website.

As one of the top seven startups from Y Combinator's Winter '16 Demo Day, they are funded by Y Combinator as well as two strategic industrial companies. Gecko Robotics placed third at the 2016 RBPC.

**GestVision****Yale University | 2014 Competitor | www.gestvision.com**

GestVision is a biotechnology company that is committed to securing safer pregnancies by fearlessly challenging the status quo for women's health. They promise to deliver confidence to healthcare providers to make sound clinical decisions. Their aim is to address the unmet medical needs in women's health by bringing forth premium products based upon robust scientific discoveries.

A grant from the U.S. Agency for International Development will make GestVision's diagnostic available for testing in low resource communities such as Bangladesh and Mexico City. GestVision was the recipient of a Patents for Humanity Award from the U.S. Patent and Trademark Office. The Connecticut Technology Council the 2017 Women of Innovation® Entrepreneurial Innovation and Leadership Award was given to founder Wendy Davis.

GestVision is based in Groton, Connecticut.

**Grox Industries****University of Arkansas | 2017 Competitor | www.grox.co**

Grox Industries specializes in graphene-based solutions for surface coatings, composites, polymers, and conductive inks. Their mission is to reduce commercial, industrial, and residential energy costs through the implementation of lighter and lower thermally transmittance materials.

Grox was the second place winner of the 2017 U.S. Department of Energy's Cleantech UP National Competition. The company is based in Fayetteville, Arkansas.



Hazel Technologies

Northwestern University | 2016 Competitor | www.hazeltechnologies.com

Hazel Technologies is a USDA-supported company based in Chicago, Illinois. The company helps growers, packers, and shippers of produce extend the shelf-life of their fruits and vegetables, which reduces produce rejections, can extend seasonal availability, and expand geographic markets. Hazel Technologies develops products in the form of packaging inserts that slow ripening of produce due to ethylene and use a blend of essential oils to reduce to inhibit microbial growth.

They are partnering with one of the largest vegetable growers in Honduras and the Dominican Republic to improve the quality of post-harvest vegetables for customers in Europe and North America. Hazel has completed 12 successful pilots, deployed over 25,000 units across North America. They are winners of the 2016 Illinois Clean Energy Fund Award.



Heart I/O

University of Pittsburgh | 2019 Competitor

HEARTio is a digital diagnostic startup that uses artificial intelligence to help physicians identify heart abnormalities. They are based in Pittsburgh, Pennsylvania.



Helix Steel

Formerly Polytorx & Torx International | Georgia Institute of Technology | 2003 Competitor | www.helixsteel.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 is reinforcing the tunnels that connect 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, and it was featured on ABC's Extreme Makeover: Home Edition. Helix was used to rebuild homes in Joplin, Missouri destroyed by the 2011 tornado. In the past year, the company has filed new patents and received ISO 9001-2015 accreditation.

Helix is manufactured in the United States but sold worldwide from offices in the United States, Canada, Mexico, Brazil, Australia and Singapore. Located in Ann Arbor, Michigan, the company operates two manufacturing facilities, using its own proprietary, high-speed machines for manufacturing.

Helix Steel was acquired by their leading investor, Pensmore Reinforcement Technologies in January 2017. RBPC alumnus and founder Luke Pinkerton will remain CTO of Helix Steel.

**Husk Power Systems**University of Virginia | 2008 Competitor | www.huskpowersystems.com

Husk provides affordable and reliable power to households and businesses in rural villages. They design, build, own and operate the lowest cost hybrid power plant and distribution network in India and Africa, offering customers a flexible 'pay-as-you-go' energy service, using a mobile-enabled smart metering system. Their grid-compatible "100% theft-proof" solution can be rolled out quickly and cost effectively to support national electrification plans.

They currently operate over 75 mini-grids with another 23 under construction. Husk hires local people and train them in highly skilled job of Solar PV and biomass generator system so that they can efficiently run and operate the power plants.

Husk has received funding from corporate foundations, 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, the Voice of America, The Washington Post and PBS News Hour.

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

Hybridtronics is commercializing retrofit conversion kits so conventional fuel vehicles can be converted from petrol, diesel or CNG powered to hybrid, plug-in hybrid or full electric powered. The kit can potentially cut fuel consumption by over 50 percent in certain driving conditions or be used to boost the acceleration of almost any road vehicle.

The company is headquartered in New Delhi, India.

**Hyliion**Carnegie Mellon University | 2015 Competitor | www.hyliion.com

Hyliion is engineering a revolution in the trucking industry by enabling immediate electric hybridization of Class 8 trucks. Hyliion is transitioning out of product demos, accepting repeat orders, and collaborating with Dana and fleets to have the 6X4HE available on the production line.

Hyliion acquired a battery supplier in 2018 and is working with industry partners on connected devices and preventative maintenance. In March 2020, Hyliion partnered with Penski Truck Leasing for delivery of three of its 6X4HE Class 8 vehicles. In 2017, Founder Thomas Healy was named as one of Forbes 30 Under 30 in Energy. They were also winners of the U.S. Department of Energy's 2015 National Clean Energy Business Plan Competition and placed third in the 2015 Rice Business Plan Competition.

Hyliion is headquartered in Austin, Texas with a service and installation facility in Pittsburgh, Pennsylvania and a battery technology center in Irvine, California.

**Illusense**

Formerly AME (Agile Monitoring Equipment) | The University of British Columbia, Canada | 2013 Competitor | www.illusense.com

Illusense Inc is developing leak detection and prevention technology to mitigate the environmental damage and heavy costs caused by oil pipeline leaks.

Their ultra-high resolution, laser-based, internal oil and gas pipeline inspection technology enhances integrity management by proactively prioritizing pipeline maintenance. The resulting 3D data sets allow pipeline operators to capitalize on unprecedented intelligence, enhance the understanding of the condition of their assets and deliver on their zero-leak goals.

Illusense recently raised a seed round. Additional funding was secured from Sustainable Development Technologies Canada (SDTC). The company is headquartered in Richmond, British Columbia.

**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 and spectroscopy. 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 and liquid crystal displays. They 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 FORTUNE 500 businesses 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, North Carolina. The company placed fourth in the 2007 Rice Business Plan Competition.

**Immersed Games**

University of Florida | 2015 Competitor | www.immersedgames.com

Based in Gainesville, Florida, Immersed Games is creating a video game as a platform for deep, empowering learning experiences. Gamers absorb information about life sciences while building in-game ecosystems. Tyto Ecology is their feature product. They are focusing on developing it with the goal of a complete middle school science and engineering skills learning set and have both consumer and School dashboards to allow for educator usage.

In October 2017, Immersed Games was chosen to compete at XTC (Extreme Tech Challenge) and presented at CES in January 2018. They are a part of the Intel Education Accelerator in Silicon Valley.

**Impel NeuroPharma**University of Washington | 2009 Competitor | www.impelneuropharma.com

Impel NeuroPharma is a privately-held, Seattle-based biotechnology company devoted to creating life-changing, innovative therapies for central nervous system (CNS) diseases. Impel NeuroPharma is currently investigating INP104 (POD-DHE) for acute migraine headache, INP103 (POD-levodopa) for reversal of OFF episodes in Parkinson's disease and INP105 (POD-olanzapine) for acute agitation in schizophrenia and bipolar disorders. Impel's products utilize its novel, nasal drug-delivery Precision Olfactory Delivery, or POD™, device technology to deliver liquid or dry powder forms of drug to the upper nasal cavity in a consistent and predictable manner.

In January 2019, they completed a successful Phase 1 trial of their drug to target bipolar disorders and schizophrenia. The company has service agreements with Camargo Pharmaceutical Services for regulatory consulting and strategic development. Impel has an existing licensing agreement with the Centre for Addiction and Mental Health.

Based in Seattle, Washington, 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.

**Inanovate**Babson College | 2005 Competitor | www.inanovate.com

Inanovate is developing and commercializing a new category of protein screening technology for clinical diagnostics and therapeutics.

Inanovate has completed testing and benchmarking of the Bio-ID. The device lowers the cost and improves the accuracy of diagnostic tests by rapidly and precisely measuring the concentration of multiple disease related biological molecules (biomarkers) from patient blood samples. The Bio-ID consists of a compact bench-top analyzer and disposable test cartridges. The end-user simply loads test samples into a Bio-ID cartridge, inserts the cartridge into the analyzer, hits the 'go' button and walks away.

The company has been awarded government grants through the National Institute of Cancer and the United Kingdom's Technology Strategy Board and are partnering with Sanford Research. They have offices in Sioux Falls, South Dakota and Raleigh, North Carolina.

**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; this performance gap can limit their developmental growth and 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.

**InContext Solutions****University of Chicago | 2009 Competitor | www.incontextolutions.com**

Chicago-based InContext Solutions is the leading provider of mixed reality solutions for retail, working with top blue-chip companies across CPG, hard goods, apparel, and QSR industries to rethink how they bring new retail concepts and products to market. InContext's enterprise mixed reality and decision-support platform, ShopperMX™, is an integral part of digitizing the value chain, and provides faster, more cost-effective alternatives for retail innovation.

With more than 50 clients including Nestle, Smucker's, Kellogg's, Anheuser-Busch, Dannon, and Walmart, InContext Solutions has helped some of the nation's largest retailers and manufacturers make time- and money-saving decisions. They have been named as an Innovator on the 2016 Chicago Techweek 100 list, added to the Inc. 5000 Fastest Growing Companies list, named as a finalist for the Best B2B Company in the 2016 Moxie Awards, awarded for Chicago's best technology work culture by Tech in Motion, and have been recognized as one of "America's Most Promising Companies" by Forbes.

**Infinite Cooling****Massachusetts Institute of Technology | 2018 Competitor | www.infinite-cooling.com**

Infinite Cooling's mission is simple: to mitigate water scarcity around the world. They help power plants and other industrial processes reduce their water consumption and water treatment costs by recovering water from their cooling tower exhaust. The company has a patent-pending technology developed at MIT that uses electric fields to capture water from the plumes leaving cooling towers.

Cofounders Maher Damak & Karim Khalil were recognized on the 2018 Forbes 30Under30 (Energy). Based in Somerville, Massachusetts, Infinite Cooling won the MIT \$100K Grand Prize, MassChallenge Grand Prize, Department of Energy Cleantech Grand Prize, MIT Clean Energy Prize, and the grand prize at 2018 Rice Business Plan Competition.

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

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

Innoblative has received grants from the National Science Foundation and VentureWell and was in the 2017 cohort at iCatalyst. Named one of the 15 Chicago Startups to Watch in 2015, Innoblative has been featured in FORTUNE, CNN Money and the Chicago Tribune. They are partnering with Insight Product Development to build a pre-clinical prototype to test in an animal model. The Innoblative team placed fourth at the 2014 RBPC and are based in Chicago, Illinois.

**Inscope Medical Solutions****University of Louisville | 2015 Competitor | www.inscopemedical.com**

Inscope Medical is a connected medical device company focused on endoscopy devices. Their first device is a wireless video laryngoscope with integrated suction that increases the speed, efficacy, and safety of intubation. By removing the need for expensive tower-based systems, their laryngoscope is substantially less expensive than leading competitors. The Inscope makes video laryngoscopy accessible in operating rooms, ICUs, and emergency departments that previously have not had adequate access to the technology. With a centralized image collection and analysis, their vision is to become the IoT platform for endoscopes.

Inscope won second place at the 2015 RPBC. They are based in Jeffersonville, Indiana.

**Instapath****Tulane University | 2018 Competitor | <https://instapathbio.com>**

Instapath has developed a microscopy system that provides an exact picture of cancer biopsies within seconds, providing essential biopsy quality evaluation to ensure an accurate final diagnosis. Their system is capable of imaging biopsy samples immediately upon removal in seconds at subcellular resolution, all while preserving the tissue for future analysis.

Based in New Orleans, Louisiana, they are supported by VentureWell, the National Science Foundation, and MassChallenge.

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

Intellidemia celebrates a decade with its core product, Concourse. In 2007, Concourse was the first-to-market syllabus management solution. Concourse is a proven, simple-to-use platform that currently handles millions of syllabi each month.

Founded by two MBA students at Rensselaer Polytechnic Institute, Concourse solved a variety of syllabus management problems Rensselaer was encountering. Today, Concourse has become the market-leading syllabus management solution at every type of college throughout the United States and abroad.

RBPC competitors and co-founders Judd Rattner & Edward Levie still man the helm at Intellidemia. In a period of steady growth, Intellidemia is headquartered in New York City.

**Intelligent Flying Machines****Northwestern University | 2017 Competitor | www.ifm-tech.com**

Chicago-based IFM develops state of the art Computer Vision and Deep Learning systems for fully automated data capture in large warehouses. Their systems enable logistics and manufacturing companies to improve the efficiencies of their manual processes by several orders of magnitude.

They won the Fourth Revolution Award in October 2017.

**Iterative Scopes****Massachusetts Institute of Technology | 2018 Competitor | www.iterativescopes.com**

Iterative Scopes is a healthcare AI company developing analytical tools for endoscopists.

Recently, they have initiated patient enrollment in a pilot clinical study of our first product and closed their seed fundraising round. Iterative Scopes was a finalist in the Eli Lilly Challenge. They built a scientific advisory board for IBD and hired a CBO.

**Klymit****Formerly Argon Technologies | Brigham Young University | 2008 Competitor | www.klymit.com**

Klymit is a solutions company that challenges traditional approaches to the conception and fabrication of outdoor goods and apparel. Part engineers, part gear junkies, part mad scientists, and all outdoorsmen, Klymit was conceived under the idea that the experience of outdoor enthusiasts can be enhanced with new technologies and a different approach that yield quantifiably superior products.

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 spinoff is Reno-based nudown. Klymit is based in Kaysville, Utah.

**Kosmik Energy****Texas State University | 2019 Competitor | <https://www.kosmikenergy.com>**

Kosmik Energy is working on the platform product called “SunLyt”, an optical fiber daylighting system designed to vertical farming. The company is two to three weeks out from installing SunLyt at container farm in Houston. In addition, they are racing to get a vetted product by July for a pilot in the UAE (the world’s largest tomato vertical farm). Kosmik Energy has passed the technical review in the Wells Fargo IN2 program, and awaiting the Board of Directors review. The company has also participated in the SPIE startup challenge earlier this month.

**Lark Technologies****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. Currently, Lark has four products on the marketing including a wellness, diabetes prevention, diabetes management, and hypertension management platforms.

Fast Company named Lark one of the Top 10 Most Innovative Consumer Electronics Companies. It has received broad coverage in the national press including The Wall Street Journal, The New York Times, InStyle magazine, Oprah Magazine, ABC News and CBS News. Forbes named founder Julia Hu one of 20 Female Entrepreneurs to Follow on Twitter. Lark is a venture-backed company based in Mountain View, California.

**Leuko Labs****Massachusetts Institute of Technology | 2016 Competitor | www.leuko.io**

Boston-based Leuko is developing the first non-invasive white blood cell device. White blood cell assessment is a first-line indicator for various medically relevant situations, ranging from chemotherapy management to the detection of life threatening infections worldwide. This test is currently invasive and not readily accessible - it requires patient travel, blood draws and laboratory infrastructure.

Based on MIT research, Leuko is re-imagining the way to perform these tests without extracting blood and in a portable device.

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

Light Line Medical has developed a proprietary method of delivering light to prevent and treat catheter associated infections. This technology uses non-UV visible light to kill bacteria and prevent biofilm both intra and extraluminally.

Light Line Medical has four revolutionary systems in development that are compatible with off-the-shelf catheters and endotracheal tubes (we are not manufacturing catheters). Their first four products have the potential to dramatically decrease the frequency of peritoneal dialysis and hemodialysis infections, urinary tract infections, bloodstream infections, and ventilator associated pneumonia.

Their first patent was granted in 2017; additional patents are pending. Light Line Medical won fourth place at the 2015 Rice Business Plan Competition.

**Lilac Solutions****Northwestern University | 2017 Competitor | www.LilacSolutions.com**

Lilac Solutions is a mining technology company based in Oakland, California. Lilac has developed a patented ion exchange technology that facilitates production of lithium from abundant brine resources with minimal cost and ultra-low environmental footprint. Lilac's mission is to increase lithium supplies needed for electric vehicles and renewable energy storage.

With funding from Breakthrough Energy Ventures, the company is headquartered in Oakland, California.

**LilySpec****Rice University | 2019 Competitor | www.lilyspec.com**

The vaginal speculum is one of the worst parts of a woman's visit to the ObGyn. Used for dilating the vagina during 78 million pelvic exams and procedures in the US each year, the speculum is known for causing pain, discomfort, and anxiety. The LilySpec is a novel vaginal speculum that provides enhanced comfort through a unique, patient-centered design. Unlike current specula, the LilySpec accommodates women of all body types and is deployed with a gentle radial expansion mechanism, thereby improving the patient experience. The company is based in Houston.

**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 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 "World's Best Technologies" at the annual World's Best Technology Showcase.

Lumedyne Technologies was acquired by Google in 2015. All details and terms of the sale are confidential.

**Luso Labs****Columbia University | 2017 Competitor | www.lusolabs.co**

Luso Labs will help stop cervical cancer by providing automated, accurate and accessible screening worldwide. Founded by Columbia and Stanford University engineers, Luso Labs addresses critical problems encountered during visual inspection with acetic acid testing through the cerVIA system. Coupling a custom camera with a lesion detection algorithm in an Android-compatible device, the cerVIA screening system detects precancerous lesions on the cervix in a manner that integrates easily into existing clinical practices.

Cisco sponsored the Luso team to attend the Cisco Live Melbourne customer conference in March 2019, where they will participate in a mini Global Problem Solver Challenge. Luso Labs also won \$200,000 in the Vodafone Wireless Innovation Project in 2018. They are based in New York City.



LymphaTech

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

LymphaTech has developed a mobile-based 3D imaging system specifically designed for healthcare-focused human body measurement applications.

In 2018, LymphaTech secured a license agreement with a medical compression manufacturer to use LymphaTech software to measure, size, and fit custom medical compression garments. LymphaTech also secured investment from a strategic partner. Previously, they were contracted by the United States Agency for International Development (USAID) and the German Federal Ministry of Education and Research to monitor lymphedema status internationally in six countries in association with the Bill and Melinda Gates Foundation.

Based in Atlanta, Georgia, LymphaTech graduated from the National Science Foundation I-Corps program. The company placed sixth overall at the 2014 Rice Business Plan Competition.



Medical Informatics

Rice University | 2013 Competitor | www.medicalinformaticscorp.com

Houston-based Medical Informatics Corp. (MIC) is revolutionizing healthcare by transforming the way patients are monitored. As a software-based monitoring and analytics company, their revolutionary Sickbay™ platform archives, aggregates, and transforms otherwise not-recorded, high-resolution waveform data across disparate devices to enable real time, anywhere, anytime remote monitoring across the entire continuum of care. The same platform can then be leveraged to use machine learning and AI to deploy real-time, predictive analytics that get ahead of deterioration and risk and enable data-driven medicine and patient centered care.

In January 2019, MIC announced an agreement to deliver MIC's Sickbay platform using Dell's server and storage solutions. MIC is participating in the 2018 Health InnovatAR health care accelerator program. The program is supported in part through a grant from the Arkansas Economic Development Commission.



Medical Magnesium

RWTH Aachen University, Germany | 2017 Competitor | www.medical-magnesium.com

Medical Magnesium is a medtech startup based in Aachen, Germany. They are revolutionizing modern patient care by developing and marketing bioabsorbable orthopedic implants made of magnesium.

Medical Magnesium focuses on fracture repair management within sports and trauma medicine. Especially the current standard of care to cure bone fractures requires a removal surgery of the permanent implant material. Patients inevitably suffer from unnecessary pain, longer healing time, high risk of infection causing increased healthcare costs. Medical Magnesium has developed the next generation of implants that eliminate the need for a removal surgery, as they absorb in a controlled manner after healing the fracture. The company's goal is to offer surgeons and patients tailor-made, highly functional magnesium-based solutions which improve patient care and reduce healthcare costs.

The company's CE approval audit is scheduled for June 2019. They placed third in the 2017 RBPC.

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

Medtric 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 possess significant antimicrobial activity and scientific studies have shown rapid inactivation (<60 seconds) of multidrug resistant bacteria strains such as MRSA and VRE, fungus and viruses. Medtric has implemented this nanotechnology into products designed initially for wound care, with additional applications in industrial and agricultural sectors.

**Membrion****University of Washington | 2017 Competitor | www.membrion.com**

Membrion has developed breakthrough Molecular Self Assembly (MSA) technology that uses readily available, non-toxic and low-cost materials to produce advanced ceramic ion exchange membranes which perform better and cost significantly less than today's ceramic and polymer options. Membranes are at the heart of solutions to enable more cost-effective solutions for clean energy, fresh water supplies and human health challenges. Membrion's affordable, high-performance membranes will help unleash a new wave of innovation and market penetration for these technologies.

The Seattle-based company announced that they raised a funding round in December 2018.

**MeshTek Labs****Formerly ilumi Lighting Solutions | The University of Texas at Dallas | 2011 Competitor | <https://meshtek.com>**

MeshTek is building the roads that will connect the IoT world of tomorrow. Enlightening Things to Enlighten People.

They make the world's best wireless IoT infrastructure based on Bluetooth Mesh, called MeshTek. MeshTek enables other Manufacturers to make more reliable, scalable, and faster connected devices that naturally connect the world around us.

MeshTek also powers their award winning series of LED Smart lighting products help you find, set, and schedule exactly the right light for you, with the ease of screwing in a light bulb. Wake up to a scheduled Maui sunrise in the morning, improve your sleep cycle with Circadian lighting, and enjoy special occasions with colorful effects. Available at Best Buy, Target, Amazon, and ilumi.co.

MeshTek is a Mark Cuban Company as seen on ABC's Shark Tank. They are based in Dallas, Texas.



Microlution

University of Illinois at Urbana-Champaign | 2005 Competitor

Microlution Inc. pioneered the development of integrated micro manufacturing solutions for precision parts. Traditional machines are too slow and too expensive to create the micro parts required for today's advanced automotive, consumer, medical and aerospace products. Microlution's micromachining products use both laser and milling technologies.

Microlution has been featured in trade publications including Micro Manufacturing Magazine, Commercial Micro Manufacturing and Engineering TV. With its partners, Microlution was awarded a grant from the U.S. Department of Energy to develop an energy efficient method for micromachining complex shapes using ultrafast laser technology. Additionally, the University of Cincinnati BioMicroSystems Labs successfully used Microlution to machine precision microfluidic channels for particle separation and electrochemical solutions. Based in Chicago, Illinois, Microlution proudly designs and builds every machine in the United States.

In May of 2016, Microlution was acquired by GF Machining Solutions. At the time of sale, Microlution was generating \$10 million in annual sales and had a workforce of 30 people. Microlution continues to be run by founders and RBPC alumni Andy Phillip and Andrew Honegger. Lincolnshire, Illinois-based GF Mining Solutions intends to use their purchase to broaden their technology portfolio and better serve clients in the medical and aerospace industries. Details of the sale remain confidential.



MicroTransponder

The University of Texas at Dallas | 2008 Competitor | www.microtransponder.com

Headquartered in Texas, MicroTransponder has developed the Paired Vagus Nerve Stimulation System (Paired VNS™ System) based on decades of neuroscience research. The Paired VNS™ System has been developed to treat two separate neurological conditions. The first is the Serenity® System for the treatment of chronic tinnitus. The second is the Vivistim® System for treatment of post-stroke upper limb mobility issues.

MicroTransponder's funding comes from venture capital groups as well grants from the U.S. Department of Defense and the National Institutes of Health. Founded in 2007, the company is based in Austin, Texas.



Midway Pharmaceuticals

University of Chicago | 2005 Competitor | www.midwaypharma.com

Midway Pharmaceuticals is initially developing a proprietary daily dietary supplement to enhance bone health in post-menopausal women. In addition to calcium and vitamin D, Midway's product contains components that affect interactions between the gastrointestinal tract (or gut) and gut bacterial populations (the Microbiome).

Midway Pharmaceuticals is a privately-held specialty company located in Philadelphia. Midway was founded by gastrointestinal scientists at the University of Chicago in the Departments of Surgery, Digestive Diseases, Infectious Disease and an experienced gastroenterologist and biotech entrepreneur. The initial observations leading to products to maintaining health through gut integrity was extended by a scientist in bone physiology at Michigan State University in collaboration with Midway.

Midway is focused on developing proprietary agents for enhancing health and wellness in people suffering gastrointestinal and systemic disorders. Gut bacteria are increasing thought to influence bone density, obesity, inflammatory bowel disease, irritable bowel syndrome, radiation injury to the gut during cancer therapy, neonatal necrotizing enterocolitis in premature infants, gut bacteria-derived sepsis.

In 2015, Midway founder and CEO Rifat Pamukcu was inducted into the American Institute for Medical and Biological Engineering's College of Fellows.

**Miret Surgical****Stanford University | 2009 Competitor | <http://miretsurgical.com>**

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 Percuvance system requires minimal surgeon retraining and aligns with current insurance reimbursement plans.

In 2016, the U.S. Food and Drug Administration granted Miret Surgical 510k clearance for its percutaneous surgical system. During this same timeframe, they closed on a funding round, which will help develop their laparoscopic surgical devices. They are based in Elmhurst, Illinois.

**MITO Material Solutions****Oklahoma State University | 2017 Competitor | www.mitomaterials.com**

MITO Materials makes functional additives to improve composite material durability, flexibility, and performance.

The company services original equipment manufacturers in multiple industries by supplying their additive to epoxy formulators in order to enhance the chemical bonds in epoxy products. RV, boat, and aerospace manufacturers who purchase MITO-powered epoxy are given the ability to make materials lighter, saving them fuel and materials cost; or tougher, which can significantly reduce the likelihood of mechanical failure.

MITO's current product is being scaled for industrial use, and they have new product coming down the pipeline. They received National Science Foundation Phase II funding and 2 matching state grants. The team participated in the Techstars accelerator powered by The Heritage Group. Both patents licensed from OSU were granted, and new patents will soon be filed.

Headquartered in Stillwater, Oklahoma, MITO Materials came in second at the 2017 Rice Business Plan Competition.

**MiVUE****University of California, Los Angeles | 2019 Competitor | www.mivuehealth.com**

MiVUE is a pediatric health company focused on at home solutions for parents. They are currently raising a seed round; their lead investor has been identified. MiVUE is headquartered in Los Angeles, California.

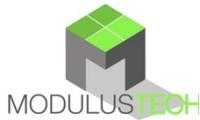
**mobius****Formerly Grow Bioplastics | The University of Tennessee | 2016 Competitor | www.mobius.co**

At mobius, they're creating a world where There's Wonder in Waste. Their first products are a family of biodegradable and compostable plastic materials made from lignin, a waste product of the paper and biofuel industry that is a natural material found in all trees and grasses. Their focus is the development of these materials for applications in horticulture, agriculture, food service packaging, and beyond.

The company has pivoted their business model to focus on production of lignin-based biodegradable plastic resin pellets, rather than the end product of biodegradable lignin-based plastic mulch film. This has expanded the initial market opportunities, and mobius is currently focusing on materials suitable for biodegradable horticultural containers like flowerpots.

mobius is finalizing two paid partnerships, one that is joint with a major home improvement retailer in the U.S. and a similar major home improvement retailer in Europe, and a second partnership with a major supplier of lignin, their primary feedstock, from Finland.

With support from the National Science Foundation and the Clean Energy Trust, mobius is headquartered in Lenoir City, Tennessee.

**Modulus Housing Solutions****IIT Madras | 2019 Competitor | www.modulus-tech.com**

ModulusTech provides environment friendly, innovative flat-packed housing solutions, making it possible to set up houses in as little as three hours. The houses come with integrated utilities and provide superior energy efficiency and thermal comfort. ModulusTech is working on solving housing problems for displaced people through its one of a kind flat-packed house design. Helping refugees and IDPs get back to their normal lives as soon as possible. The houses can be assembled in as little as 3 hours, making it possible to build large, cost effective colonies within a month. They have plumbing and electricity included, while offering protection in harsh climates and more.

Based in Karachi, one of their products has been deployed to help doctors on the front line during the global #covid19 pandemic.

**Modvion****Chalmers University of Technology, Sweden | 2016 Competitor | www.modvion.com**

Modvion is a Swedish Engineering and Industrial Design company developing modular designs in renewable Engineered Wood Products to simplify and improve construction logistics. Their current area of focus is in wind tower technology. Modvion's patented module technology enables significantly decreased cost, efficient transportation and streamlined installation of towers exceeding 120 m. Ultimately, this results in increased cost efficiency in the harvesting of wind resources.

In 2019, the Swedish energy provider Varberg Energi agreed to purchase and install Modvion's first commercial scale wind turbine tower. The structure, made of laminated wood will be 492 feet tall. Expected to be installed in 2021, the tower will be the tallest wooden structure in the world. Modvion headquarters in Göteborg, Sweden.

**MODX****Formerly Enterprise Theory | Southern Methodist University | 2009 Competitor | www.modx.com**

MODX is the company that backs the open source Content Management System and Web Application Framework. MODX Revolution is the world's fastest, most secure, flexible and scalable Open Source CMS. Their cloud platform, MODX Cloud, is the ultimate hosting for modern PHP applications, especially MODX.

Founded in 2004, the company bootstrapped its way into profitability. 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.

**Movellus Circuits****University of Michigan | 2014 Competitor | <https://www.movellus.com>**

Movellus develops traditionally analog IPs using proprietary generators which use industry standard digital tools and standard cell libraries. These IPs are optimized per design, process portable and silicon verified.

Movellus' customers include semiconductor and systems companies in the artificial intelligence, networking, and FPGA segments. With funding from Intel Capital, Movellus will use the funds to expand its customer base and to increase its portfolio of PLLs, DLLs and LDOs for use in semiconductor and system designs at advanced process nodes.

Semiconductor customers have been verifying Movellus' technology since 2015. The company has offices in San Jose, California and Ann Arbor, Michigan.

**NABACO****Texas State University | 2019 Competitor | www.nabacoinc.com**

Nabaco is developing our coating technology's MVP for use on produce, flowers, and bottles. Natuwrap by Nabaco is a unique, edible protective coating for food. With low production costs and easy application methods, Natuwrap is a potentially transformative solution for some of the most pressing matters relating to food shortages. Natuwrap triples the shelf life of the fruits and vegetables that we have tested. This product is also environmentally friendly and can be applied with either spraying or dipping methods which eliminates packaging waste.

Headquartered in San Marcos, Texas, Nabaco has received endorsements from H.E.B. Grocery and raised a seed round. They are also now working with plantain farmers in Ghana, Africa and with a bottle company in Italy.

**Nano Precision Medical****University of California, San Francisco | 2009 Competitor | <http://www.nanoprecisionmedical.com>**

Nano Precision Medical is developing a very small subdermal implant for long-term delivery of medicine to improve the compliance of chronic diseases. The rice-grain sized device is designed for easy implantation under the skin.

Their all-titanium capsule provides long-term, constant-rate delivery of therapeutic molecules using a proprietary titania, nanoporous membrane technology called NanoPortal. Multiple drug candidates can be delivered using NanoPortal. Exenatide was selected as the first drug candidate because of the unmet medical needs in Type 2 diabetes mellitus, and there is room for improvement with currently available treatments. The combination of device/drug will improve outcomes by ensuring compliance, with the potential to lower overall costs of care.

Nano Precision Medical's first application is a six month implant to treat Type 2 Diabetes. In 2017, they were awarded two significant patents covering the company's nanoporous membrane technology. The company was founded in 2009 and has funding from experienced angel investors and a large pharmaceutical company. 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, California.

**NanoGraf****Formerly Sinode Systems | Northwestern University | 2013 Competitor | www.nanograf.com**

NanoGraf, a manufacturer of materials for lithium-ion batteries, is currently in pre-production prototype development with beach-head customers for the premium power segment. Recently NanoGraf has started a pilot-scale manufacturing plant outside Tokyo with their Japanese partner to support beachhead market sales requirements. NanoGraf was awarded a \$7.5M project with Ford/Chrysler/GM/Dept of Energy through their USABC consortium to develop battery materials for electric vehicle applications.

Co-founder Cary Hayner was named as one of Forbes' 2016 30 Under 30 in Energy. His co-founder and company CEO, Samir Mayekar was listed as one of Midwest Energy News' 40 under 40. The company won first place in both the 2013 Rice Business Plan Competition and the 2013 U.S. Department of Energy Business Plan Competition.

NanoGraf is based in Chicago, Illinois.

**NanoLinea****Rice University | 2014 Competitor | <http://nanolinea.com>**

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 is a graduate of the TMCx accelerator program in Texas Medical Center.

**Neopenda****Columbia University | 2016 Competitor | www.neopenda.com**

Neopenda is a global health social enterprise innovating medical devices to improve newborn health outcomes in low-resource settings.

Their first product is a wearable, vital signs monitor that continuously measures four crucial vital signs, and alerts nurses of a newborn in need of immediate attention. Neopenda re-engineered clinically validated technologies into a simple, multiparameter sensor array that measures heart rate, respiratory rate, blood oxygen saturation and temperature. The low-power sensors use rechargeable batteries and wirelessly transmit data to a central monitor, which alerts nurses when a newborn is in distress.

Neopenda has been featured in several articles in Forbes, The Washington Post, Fast Company, and Global Citizen. Cofounders Sona Shah and Teresa Cauvel were named to Inc.'s 2017 list of 30 Under 30. The team received this year's UN Women She Innovates Prize for Gender-Responsive Innovation.

The company is based in Chicago, Illinois.

**Neurable****University of Michigan | 2016 Competitor | www.neurable.com**

Neurable is developing software based on breakthrough brain-computer interface (BCI) research and novel insights in neuroscience. Its patent-pending technology interprets intention based on brain activity, providing users with reliable real-time control of software and software-controlled devices using only their minds. As a platform for human-computer interaction, Neurable is targeting virtual and augmented reality, licensing its software development kit (SDK) to content developers and headset manufacturers to enable completely new and immersive experiences.

Boston-based Neurable is partnering with Trimble to advance brain-computer interface technology solutions for the transportation and architecture, engineering and construction industries.

Neurable placed second at 2016 Rice Business Plan Competition.

Nikola Labs**The Ohio State University | 2015 Competitor | www.nikola.tech**

Nikola Labs is a wireless power company with an advantaged far-field technology that converts radio frequency (RF) energy into direct current (DC) power.

Nikola Labs' wireless power technology is based on a novel RF energy harvesting circuit invented at OSU. The technology, known as radio frequency to direct current (RF to DC), works by sending a RF signal from an existing or dedicated transmitter to a receiving device that interprets radio waves into realizable power. The interpretation is done by first capturing the RF energy on an antenna, rectifying the wave, boosting voltage and managing the DC power to charge a storage element or directly operate a device.

The company has secured Fortune 500 clients and was named one of Ohio's top 50 startups to watch. They are supported by The Ohio State University, ANSYS, and Texas Instruments. The company is headquartered in Westerville, Ohio.



**Niricson Software**University of Victoria | 2019 Competitor | www.niricson.com (coming soon)

Niricson helps civil engineers to inspect civil structures using Robotics and Computer Vision. The Vancouver-based company is partnering and has received investment from one of the largest European engineering consulting companies.

**Noleus Technologies**Rice University | 2018 Competitor | www.noleustechnologies.com

Noleus Technologies is developing a novel medical device that accelerates patient recovery after abdominal surgery. It decreases length of stay for patients, saving physicians time and hospitals money.

Physicians currently have no available devices to prevent post-operative ileus and bowel edema. The resulting complications lengthen patient length of stay, costing hospitals \$2,000 per night. Noleus is a medical device designed to reduce length of stay by preventing post-op ileus and corresponding complications following abdominal surgeries. Patients recover sooner, physicians save time, and hospitals save money.

NovaBio TechnologiesFormerly 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 filed a nonprovisional patent as well as 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. They recently received additional funding through a Utah TAP (Tuition Assistance Program) grant.

Novabio has developed a fully functional prototype and has conducted preliminary mechanical tests showing the efficacy of the device. The company won the grand prize at OneStart and was recently highlighted in two local TV shows. The team is pursuing licensing agreements with several medical device companies.

**Novira Therapeutics**

Formerly Molecmo Nanobiotechnologies | Harvard University | 2007 Competitor

Based in Doylestown, Pennsylvania, 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 research and development 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 overcome the limitations of current CHB therapies when used either as monotherapy or in combination with existing standards of care.

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

**NovoThelium****The University of Texas at San Antonio | 2017 Competitor | www.novothelium.com**

NovoThelium is developing a tissue engineered nipple so that patients can regenerate a nipple made from their own cells after mastectomy that maintains shape, has natural pigmentation, and the potential for improved sensation.

The company is one of the ten U.S. laureates for the 2018 Yei Start in France accelerator. The team was awarded a National Science Foundation Innovation Corp grant and featured on National Public Radio, PBS, Xconomy, the Rivard Report, the San Antonio Express News, and Nasdaq. The San Antonio, Texas-based team placed sixth at the 2017 RBPC.

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

NuMat Technologies is a U.S. technology company innovating at the intersection of high-performance computing, chemistry, and engineered systems. The company works with leading partners in the microelectronics, life-sciences, defense, industrial, and energy sectors to design, build, and deliver molecularly engineered products and systems. NuMat is a recognized pioneer in the field of metal-organic frameworks — MOFs — an emerging class of nanoporous materials.

In December 2018, the U.S. Army Research, Development, and Engineering Command Chemical and Biological Center awarded NuMat a multi-million dollar contract to develop and manufacture next-generation materials to protect soldiers. NuMat's customers include the U.S. Department of Defense, which funded early research; Versum Materials, a specialty gas and chemical producer for computer chip manufacturers, and Germany's Linde, the world's largest industrial gas company.

Co-founder Chris Wilmer was named on the 2012 Forbes' list of 30 Under 30 in Energy. 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. NuMat is headquartered in Skokie, Illinois.

**NuMiX****Northwestern University | 2018 Competitor | www.numixmaterials.com**

NUMiX Materials creates adsorbent systems to recover valuable dissolved metals from industrial process water. NUMiX has two provisional patents and is participating in Cohort 3 of the Argonne National Lab Chain Reaction Innovations program. They are based in Chicago, Illinois.

**NVBOTS****Massachusetts Institute of Technology | 2014 Competitor**

Spun out of MIT by a team of four MIT engineers, New Valance Robotics (NVBOTS) provided enterprise and industrial 3D printing solutions that delivered high throughput production of parts in metals, composites, ceramics, and polymers for functional applications. The NVPro, with patented auto part ejection technology, was the only 3D printer Built to Share™. It offered the first automated part ejection in the industry and was paired with NVCloud software that allows users to print parts anytime, from any device – while providing administrators with full control of print queues and workflows typical in a shared-use scenario. The NVPro was uniquely suited for continuous 24-7 operation in multi-user environments and production 3D printing environments.

In January 2017, NVBOTS spun out a metal printing company, Digital Alloys. Digital Alloys raised a Series A in their first couple months of operation and is headquartered in Burlington, Massachusetts. NVBOTS was one of Fast Company's Top 10 Most Innovative Companies in Education for 2016. Co-founder, Chris Haid, was named to Forbes' 2015 list of 30 Under 30 in Manufacturing and Industry.

Cincinnati Incorporated acquired NVBOTS in November 2017. Based in Harrison, Ohio, Cincinnati Inc. manufactures laser cutting systems, powdered metal presses, and additive manufacturing machines.

Odin Technologies**Northwestern University | 2019 Competitor | www.odinhealthtech.com**

Odin Technologies is a smart medical device company based out of Chicago, IL. With the intent to stop patients from unnecessarily getting recommended for emergency fasciotomies, Odin Technologies is developing a non-invasive diagnostic tool to monitor compartment pressure and tissue perfusion in trauma patients.

They were semifinalists in the 2020 ASU Innovastion Open.

OmniLife**Formerly HealthTech Solutions | The University of Iowa | 2017 Competitor | www.omnilife.ai**

OmniLife is a mobile health information technology company that provides patient-centric software as a service to the organ failure care continuum. Their products and services facilitate seamless comprehensive care delivery for organ failure patients by optimizing clinical communication among payors, providers, and patients. OmniLife data are used to fuel recommendation and prediction engines for increasing quality of care and lowering costs.

Cofounder Dalton Shaul was named to the 2018 Forbes's list of 30 Under 30 in Healthcare. The company is headquartered in Iowa City, Iowa.



**OmniVis****Formerly PathVis | Purdue University | 2017 Competitor | <https://purdueiris.wixsite.com/pathvis>**

OmniVis is a diagnostics company specializing in smartphone technologies for detecting pathogens at the point of care and to track these disease outbreaks in real time.

OmniVis is developing an integrated pathogen detection platform that can transform the speed, accuracy, and economics of point-of-care pathogen detection. Their technologies have been validated in detection of cholera at concentrations found in environmental samples, and we envision rapid development for similar harmful human pathogens. They want to increase the efficiency of infectious disease monitoring and response by providing medical workers with rapid, accurate disease diagnosis at the point-of-care and to provide aid organizations with time and geographical data with which they can make informed decisions about medical care resource distribution.

Since competing at Rice, OmniVis developed a malaria assay and an HIV assay. Their field tests in Haiti over the last couple months are coming back with great results. The team has been accepted in NSF I-Corps and submitted two patent applications. They've received positive feedback and press from IEEE spectrum, University Press, over seven conference talks, and several peer reviewed publications. OmniVis won first place at the Vodafone Wireless Innovation Program and was second runner up on the Cisco Global Problem Solver Challenge.

ONCOLINX**Oncolinx****Dartmouth College | 2016 Competitor | www.oncolinx.com**

Oncolinx is a biotech startup with office in Boston, Massachusetts and London, England.

They are developing the next generation of antibody-drug conjugates (ADCs)--powerful, targeted cancer therapies that are more effective and have dramatically fewer side effects than current methods of cancer treatment. These therapies can be targeted to nearly any type of cancer. The highly selective nature of the drug ensures that healthy cells won't be destroyed.

Their drug will be tested for efficacy and drug metabolism in the U.S. National Laboratory aboard the International Space Station's sometime in 2017. In the microgravity of space, cells grow more organically - in3D - mimicking how cancer cells grow in the body.

In April 2017, Oncolinx's innovative cancer experiments from Cape Canaveral were delivered to the International Space Station's (ISS) U.S. National Laboratory, managed by the Center for the Advancement of Science in Space. The tests will study the efficiency and metabolism of the antibody-drug conjugates. Oncolinx partners with more than dozen pharmaceutical companies and hopes to begin human trials soon. They have incubator space in the Mass Innovation Labs and the TMCx. The company won the grand prize at the 43North competition and placed fifth at the Rice Business Plan Competition.

**Opharmic Technology****Formerly Sonikure Technology | The Hong Kong University of Science and Technology, China | 2015 Competitor | www.opharmic.com**

Opharmic Technology (former Sonikure Technology) is a privately held medical technology company developing novel ocular drug delivery technology and devices. The company was founded in 2016 based on a patented ultrasound-mediated ocular drug delivery technology from the Hong Kong University of Science and Technology. With safety and feasibility well-demonstrated in pre-clinical studies, the technology non-invasively delivers large molecules to the posterior eye segment through the sclera.

With the vision to replace invasive intravitreal injections, Opharmic is currently in preparation of two large-scale pre-clinical studies to streamline product development, and to validate additional technology applications.

OPUS¹²**OPUS 12****Formerly Obtainium | Stanford University | 2015 Competitor | www.opus-12.com**

Based in Berkeley, California, OPUS 12, is developing revolutionary technology that transforms CO2 emissions into cost-competitive liquid fuels and chemicals, using only water and clean electricity as inputs.

Their technology can bolt onto any existing source of industrial CO2 emissions, from petroleum refineries to fossil fuel power plants. The products they generate are green in two ways: they have a lower carbon footprint than conventional fuels and chemicals but can be produced at similar cost.

The Opus 12 team has won the U.S. Department of Energy's Transformational Award plus a number of grants from the National Science Foundation, NASA and the U.S. Department of Energy.

Since competing at Rice, OPUS 12 has been raking in awards and accolades. Nicholas Flanders was named on 2016 Forbes' list of 30 Under 30 in Energy. The team won the Forbes for-profit Change the World Competition at the Under 30 Summit in Boston, was named a semi-finalist at the NRG Carbon X-Prize and recently won the Roddenberry Foundation grand prize, funds from which will expedite the team's road to commercialization. They are hoping for a product release by December 2017.

**OrthoAccel Technologies****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.

In 2016, the company added three new patents to their portfolio, bringing their total to 13. Deloitte listed OrthoAccel on their 2017 Technology Fast 500 list, and founder Mike Lowe was recognized as a 2014 Houston Business Journal 40 Under 40 honoree. 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.

A recent funding round plus a grant from the National Institutes of Health will allow Owlet to expand into international retail distribution, launch new products and initiate an infant health study. They showcased at the 2018 International Consumer Electronics Show and were selected to compete at XTC (the Extreme Tech Challenge). Owlet Baby Monitors has been featured in numerous publications including The Wall Street Journal, The Washington Post and ABC News. The company, based in Provo, Utah, was a finalist at the 2013 Rice Business Plan Competition.

**OZÉ****Massachusetts Institute of Technology | 2018 Competitor | <https://www.oze.guru>**

OZÉ is a platform that equips small business owners in Africa to make data-driven decisions to improve their performance, tap into networks, and access capital.

OZÉ's platform is comprised of two components. On one side is an Android app for a small business owners that aggregates and analyzes transaction data to push context-specific recommendations and reports. On the other side is a portal for financial institutions that combines the app's crowdsourced data with alternative data sources to assign a credit risk score to each OZÉ user. Through the portal, banks can source and support a small-business loan portfolio.

Based in Ghana, they were finalists at the 2018 RBPC.

**PathoVax****Harvard University | 2016 Competitor | www.pathovax.com**

PathoVax is a private biotechnology startup focused on the development of a universal Human Papillomavirus (HPV) vaccine to provide prophylaxis against all cancers and diseases relating to the Human Papillomavirus (HPV).

Established by Johns Hopkins researchers, the company develops and implements cutting edge-technology in HPV prophylaxis and other indications. Their pilot vaccine, RGVax, promises to provide protection against all 15 oncogenic HPVs and many others that cause various warts.

Their lead HPV vaccine is entering clinical trials in 2019. PathoVax was awarded three federal grants in 2018. The company is one of the ten U.S. laureates accepted into the 2018 Yei Start in France accelerator.

**Pathware****Formerly MedKairos | University of Michigan | 2018 Competitor | <https://pathware.com>**

Seattle-based Pathware is a startup medical device company located in the heart of Seattle focused on creating custom hardware and software solutions for digital pathology. Pathware aims to become the leader in automated on-site cancer screening and diagnostics by assessing the quality of biopsies in real-time, thereby enabling pathologists to increase their volume of work without sacrificing quality of care. Their Bioptic® System provides rapid, whole-slide imaging paired with cloud-based slide management for seamless EHR integration and frictionless hospital adoption.

**Perception Robotics****Formerly Somatis Sensor Solutions & Somatis Technologies | University of Southern California | 2011 Competitor**

Perception Robotics was a sensor technology company focused on biologically inspired, material handling systems. They build bio-inspired robotic hands for industrial automation. They sold a compliant, human-like gripper and a gecko inspired gripper for large, flat objects.

In 2018, Perception Robotics was acquired by On Robot. On Robot combined Perception with Hungary-based OptoForce, and Denmark-based On Robot to become OnRobot.

**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 and have almost completed work on an eight-device multi-charger. On a Shark Tank update in May 2016, PhoneSoap founder Dan Barnes said that every appearance on the QVC shopping channel resulted in a boost in sales.

They have been widely featured in the media: The Wall Street Journal, Fox News, Inc., MSNBC and on the Discovery Channel. The PhoneSoap sanitizer is available at Staples, on Amazon and through the PhoneSoap website. Lori Grenier is finalizing a deal for the Bed Bath and Beyond stores—all 1,500 of them—to carry PhoneSoap. The team is now searching for new warehouse space, so they can stay ahead of demand. Their headquarters are in Provo, Utah.

**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.

Pixel's Lead Detection System was named the New Technology Development of the Year at the Oil and Gas Northeast ceremony in 2016. Shortly after a Series B funding raise in 2015, the company announced the release of four new products. They continue to raise money and expand their board. Founded in 2001, the company is located in Ann Arbor, Michigan.

**PolyDrop****University of Washington | 2014 Competitor | www.polydrop.net**

Based in Bellevue, Washington, PolyDrop, LLC is a specialty chemical company focused on lightweight materials for ESD (electrostatic discharge) and anticorrosion protection.

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. Their 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 awarded a Small Business Innovation Research Phase II grant from the National Science Foundation. They have four provisional patents on file with the U.S. Patent and Trademark Office, and their scale-up is complete. PolyDrop is currently pursuing strategic partnerships with three major coating manufactures.

**Power2Switch****University of Chicago | 2010 Competitor**

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 Excelebrate 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 based in San Francisco, California.

**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 off grid 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 company is scaling up their off-grid technologies with funds from a recent grant from the U.S. Agency for International Development. 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 is expanding its geographical reach to serve customers throughout the Peruvian Amazon.

**PreDxion Bio****University of Michigan | 2016 Competitor | www.predxionbio.com**

PreDxion Bio is a University of Michigan spin-out company backed by Y Combinator, Paul Buchheit, and Invest Detroit, and has received funding from the National Institutes of Health. Their pipeline project received FDA Breakthrough Device designation for the development of our core localized surface plasmon resonance (LSPR) biosensor technology for use in guiding life-saving immunomodulation therapy selection in critically ill patients with acute respiratory distress syndrome.

PreDxion was a semifinalist in the 2016 Accelerate Michigan Innovation Competition and part of Y Combinator's summer cohort of 2017.

**PrepMe****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 | Developed at Rice360 | Rice University | 2010 Competitor | www.rice360.rice.edu & www.3rdstonedesign.com/work/pumanibcpap

The Pumani CPAP (continuous positive airway pressure) device treats babies with respiratory distress syndrome. Developed specifically for use in the developing world by Rice 360° and collaborators Baylor College of Medicine, Texas Children's Hospital and Queen Elizabeth Central Hospital, the Pumani alleviates infant distress for 1/15th the cost of CPAPs available in the U.S. and has tripled the survival rate of babies affected by RDS.

The Pumani CPAP (formerly the InfantAIR device presented at the 2010 RBPC) continues to combat infant distress syndrome in the developing world. The project is being commercialized by industrial design firm Hadleigh Health Technologies, a subsidiary of 3rd Stone Design. The Pumani is available for purchase by world healthcare organizations and clinicians.

Grant money ensures that every public central and district hospital in Malawi will have access to a Pumani. Funding from GSK and Save the Children is affording the technology's expansion through Zambia, Tanzania and South Africa. In November 2016, the device was presented at the World Health Organization as part of a discussion of a CPAP rollout across five nations.

In 2014, co-founder and inventor Jocelyn Brown was named in Forbes 30 Under 30 list in Science and Healthcare.

**Qcue**

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

Qcue created the world's first dynamic pricing engine for live entertainment events, forever changing the way sports and entertainment tickets are priced. 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.

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. Their pricing and revenue management solutions are used by sports teams, performing arts organizations, venues, and promoters around the world, spanning three continents and more than a dozen of the world's premier sports leagues. Qcue has made 35 million price changes for clients. Their clients have seen a \$300 million increase in incremental revenue. Founded in 2007, Qcue is based in Austin, Texas.

**Quad Technologies**

Northeastern University | 2013 Competitor

Woburn, Massachusetts-based Quad Technologies is a privately held company that develops bioprocessing reagents for cell-based therapeutics.

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-threatening 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.

In January 2018, the company announced that they were partnering with Sartorius Stedim Biotech to expand production of its T-cell activation for cell and gene therapy. Their recent move into larger headquarters and laboratory space will allow them to expand their manufacturing abilities. The company received a grant from the Center for the Advancement of Science in Space.

Quad Technologies was acquired by Minneapolis-based Bio-Techne in June 2018.

**Quantitative Insights**
University of Chicago | 2011 Competitor

Quantitative Insights, Inc. was formed to realize the clinical and commercial value of QuantX,, which provides software-only, real-time analysis of breast imaging exams.

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 QuantX platform received de novo clearance from the FDA in 2017.

In July 2019, Quantitative Insights was acquired by Paragon Biosciences and renamed Qlarity Imaging.

**RagnaRock Geo**
Norwegian University of Science and Technology (NTNU) | 2019 Competitor | www.ragnarockgeo.com

RagnaRock Geo applies the power of state-of-the-art AI to complex industry problems. Based in Trondheim, Norway, they have developed an AI software that interprets seismic data. The software enhances the understanding and accelerates the workflow for geoscientists.

**Reach Production Solutions**
Formerly Hicor Technologies and OsComp Systems | Massachusetts Institute of Technology | 2010 Competitor | www.reachps.com

Reach delivers long-lasting production enhancement to multiphase wells - more, faster and longer production; quick and easy recovery; and a complete solution that keeps production flowing. Specializing in multiphase wells, they have found a solution to costly well interventions when it comes to artificial lift or fract hit fluid recovery. Reach installs on the surface – meaning it's quick, easy and even more effective than traditional artificial lift techniques. Reach is based in Houston, Texas.

**Rebellion Photonics**
Rice University | 2010 Competitor | www.rebellionphotonics.com

Rebellion Photonics provides visual gas monitoring solutions that maximize safety, operational performance, emissions mitigation and compliance in the oil and gas, petrochemical and power industries.

In December 2019, they were acquired by Charlotte, North Carolina-based Honeywell. Rebellion will operate under Honeywell's Safety and Productivity Solutions division.



Relish

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

Relish is a technology company that builds cloud-based recruiting software for hiring markets targeting masters level education.

Like match.com for the hiring market, the platform allows job seekers and recruiters to establish, build and manage relationships digitally, ensuring a larger pipeline of opportunities and more substantive and effective in-person interactions. The modular software suite includes highly customizable recruitment marketing pages and candidate profiles, a filtered search, data-driven matching with custom-built algorithms for each employer as well as advanced analytics and benchmarking reports.

The first Relish hiring platform is RelishMBA, the marketplace for MBA hiring. Launched in the summer of 2015, RelishMBA has grown to over 80 top international graduate business schools and has onboarded dozens of employers, from early stage startups to FORTUNE 500 companies.



Rendeever

Massachusetts Institute of Technology | 2017 Competitor | www.rendeever.com

Rendeever is an MIT based startup that is building a research-driven virtual reality platform for elderly care to improve the quality of life of older adults. Rendeever's platform enables older adults to travel back to their childhood homes, explore cities like Paris and all the wonders of the world, cross off bucket list items, and participate in family events that they would normally have to miss.

In the past three years, they have installed their virtual reality platform in more than 100 senior living communities across the US and Canada. Rendeever's resident engagement platform has been used by hundreds of staff members and provided more than 400,000+ experiences to thousands of residents.

Kyle Rand, one of cofounders, was named to Forbes 30 Under 30 list in 2019. Rendeever has been featured in The New York Times, xconomy, CBS, and the Voice of America.



Renewology

Formerly PK Clean | Massachusetts Institute of Technology | 2011 Competitor | www.renewology.com

Renewology has developed a proprietary method for reversing the process which creates plastics, by converting plastic waste back into fuel products. This solves the problem of plastic waste entering landfills and the environment. By chemically recycling plastic back into its basic molecular structure, it is eliminated forever. Renewology's process is sustainable, resulting in low-sulfur fuel, high energy payback and zero toxic emissions. It costs roughly \$30 per barrel to sell fuel which can be sold for \$70 per barrel.

Their demonstration facility in Salt Lake City is the first of its kind designed to operate continuously in the United States at commercial scale. Renewology's next global facility is currently underway and scheduled to be deployed in Canada. This facility will be a state-of-the-art commercial facility for converting mixed plastic waste to high value fuels at a Canadian waste company's site.

Founder & CEO Priyanka Bakaya was named to the 2012 Forbes' list of 30 Under 30 in Energy. PK Clean has been frequently featured in publications including FORTUNE, CNN Money, Inc. and the Harvard Business Review. The company, based in Boston, Massachusetts, placed third overall at the 2011 Rice Business Plan Competition.



Resonado

University of Notre Dame | 2019 Competitor | www.resonado.com

Resonado challenges the 100-year-old industry notion that the speaker has to be round by introducing its unique speaker technology whose benefits outperform those of the conventional types. Resonado licenses the technology to major OEM/ODM manufacturers who supply to big consumer brands. Resonado was founded in 2017 by four undergraduate students at the University of Notre Dame and is now an award-winning startup placed as a top hardware company at events such as TechCrunch Disrupt, SXSW Startup of the Year, and in the world's biggest student startup competition at Rice University.

Resonado is currently working to provide businesses with their disruptive speaker driver structure named flat core speaker technology. The technology, patented globally, is more space, weight, cost, and energy efficient than the existing conical driver found in virtually all sound-emitting products today. The structure can also be formed into virtually any shape, opening new horizons for product designers across industries.

In 2019, the Resonado brand is introduced nationwide as the Official Sound Partner of Notre Dame Athletics. The company was recently featured in Forbes and placed second at the 2019 RBPC.



Respira Labs

University of California, Berkeley | 2019 Competitor | www.respiralabs.com

Mountain View, California-based Respira Labs is developing the first wearable device to measure "trapped air," an early marker of Chronic Obstructive Pulmonary Disease (COPD). No reliable and validated methods currently exist to detect COPD exacerbations in time for early intervention and prevention.

By leveraging the power of non-invasive acoustic sensors, audio signal processing, machine learning and Acoustic Resonance Index Analysis (ARIA), our device will fundamentally revolutionize COPD management by predicting and preventing attacks at the patient's home, significantly improving health outcomes and patient quality of life while dramatically lowering health care costs.

In addition to receiving a SBIR Phase 1 grant from the National Science Foundation, the company placed first in the Hardware For Good, BigIdeas@Berkeley, fifth at the Global Social Venture Competition, and was a semifinalist in the Cisco Global Problem Solver Challenge.



Resthetics

University of Houston | 2017 Competitor | <http://resthetics.com>

Resthetics converts waste anesthetic gas into a safe renewable resource. The company's core technology, a porous crystalline organic framework, originated from interdisciplinary research conducted at the University of Houston. The porous crystalline organic framework not only has an extremely high affinity for fluorinated anesthetics, but also allows for desorption of the captured anesthetic molecules. We aim to sell the recaptured fluorinated anesthetics to manufacturers at a price that will be less than the cost of raw materials, time, and labor involved to produce new fluorinated anesthetic. Resthetics efficiently reduces HFC release by hospitals while generating a multimillion-dollar market.

Our technology has received national acclaim in the Nature Communications scientific journal, has numerous peer-reviewed publications, and has been the focus of numerous grants from the National Science Foundation and The Welch Foundation. Resthetics has an exclusive licensing agreement in place with the University of Houston.

Resthetics competed at the DOE competition and graduated from the TMCx. They have recently been admitted to the new class at Mass Challenge.

**Rhaeos****Northwestern University | 2019 Competitor | www.rhaeos.com**

Rhaeos is a private medical technology company, formed out of the award-winning John A. Rogers Research Group at Northwestern University, focused on developing wearable sensors to improve care of patients suffering from chronic and difficult-to-treat conditions. The company's novel FlowSense™ wireless, noninvasive thermal sensor addresses a clinical unmet need for patients with hydrocephalus and is funded by the National Science Foundation, the Pediatric Hydrocephalus Foundation, the Southwest Pediatric Device Consortium, and the National Capital Consortium for Pediatric Device Innovation.

In June 2020, Flowsense was designated as a Breakthrough Device by the U.S. Food and Drug Administration. It is on track for market entry in 2021. Since competing in 2019, the team has published work in Science Translational Medicine a high impact scoring peer reviewed journal (Q4 2018), been designed and tested a functional clinical prototype in multiple patients with hydrocephalus in IRB approved clinical studies at major academic institutions. At the 2019 Pediatric Device Innovation Symposium (2019), they were one of the six winners to receive award money and acceptance in MedTech Innovator's virtual accelerator program. In early 2020, the company was accepted into the TMCx accelerator. also At the Insight Health Tech Competition, they placed third. Rhaeos received a Phase I NSF SBIR as well as a research grant from the Pediatric Hydrocephalus Foundation. A clinical paper acceptance into Nature Digital Medicine. They were named as a "50 startups to watch in Chicago" by Built in Chicago and placed fourth at the 2019 RBPC.

**SandBox Semiconductor****The University of Texas at Austin | 2017 Competitor | www.sandboxsemiconductor.com**

SandBox Semiconductor provides software solutions to accelerate process development for semiconductor manufacturing.

Every year the semiconductor industry spends over \$1.2B creating etch and deposition recipes. Each recipe is developed by time consuming and expensive trial-and-error experiments by process engineers and can take up to 18 months and cost \$1M. SandBox Semiconductor has created the software tool RODEo that enables process engineers to identify optimal etch and deposition recipes with one-third the experiments making it three times faster and less expensive than current methods.

RODEo is based on our patent-pending technology that combines computational simulations of etch or deposition processes, the experience of the process engineer, and Bayesian statistics to dramatically reduce the number of experiments needed to determine the optimal etch or deposition recipe by a factor of three. RODEo has so far been tested on six different cases, all showing this revolutionary improvement in recipe creation.

**Sanergy****Babson College and Massachusetts Institute of Technology | 2010 Competitor | <http://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 over 250 operators, Sanergy has opened over 1,100 Fresh Life Toilets facilities. 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 the U.S. Agency for International Development. 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 Lemelson. 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.

**Sanguina****Formerly Lunula Health | Georgia Institute of Technology | 2018 Competitor | <https://www.sanguina.com/>**

Sanguina develops and markets point-of-care and over-the-counter diagnostic tools, with emphasis on the self-care market. Our first products are for on-demand hemoglobin determination for anemia screening, including non-invasive solutions. They are headquartered outside of Atlanta, Georgia.

**Saranas****Rice University | 2013 Competitor | www.saranas.com**

Saranas is a privately held Houston, Texas-based medical device company focused on improving patient outcomes through early detection of internal bleeding complications. The company's patented introducer sheath technology for vascular access procedures enables physicians to mitigate downstream consequences by addressing bleeding complications immediately, improving patient outcomes, and lowering healthcare costs.

The company was named as one of the Top 4 Innovators at the International Conference for Innovations in Cardiovascular Systems. They are based in Houston, Texas.

**Scan****Formerly QR Code City | Brigham Young University | 2011 Competitor**

Founded in 2011, Scan created web and mobile experiences and tools that enabled 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 social media company based in Venice, California.

Seismos

**The University of Texas | 2013 Competitor | www.seismos.com**

Headquartered in Austin, Texas, Seismos is a technology provider for the oil and gas industry offering real-time, frac performance evaluation and subsurface fluid-flow imaging. Our mission is to 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 Frac™ platform monitors and analyzes continuous and active data during hydraulic fracturing. They provide operators with various parameters related to stage performance. The platform consists of single smart instrument mounted directly on frac tree and connected to a cloud-based data processing platform.

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.

**Semprus BioSciences****Formerly SteriCoat | Massachusetts Institute of Technology | 2007 Competitor**

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.

They have received awards from the National Science Foundation, Purdue Research Foundation, The Alchemist Accelerator, Foudier.org, and TiE. SensorHound has offices in West Lafayette, Indiana and Santa Clara, California.

**Sensytec****University of Houston | 2016 Competitor | www.sensytec.com**

Sensytec's technology allows users to monitor the exact status their cement in real-time throughout the operational lifetime of their structures. They can pinpoint the exact location of pressures, cracks, damage, contamination and corrosion in their self-sensing concrete.

Currently, there are no other technologies that detect the structural integrity of cement in real-time over the operational lifetime of concrete structures. With smart cement, it is now possible to monitor various properties of cement structures for the full lifetime of any project. By gathering and delivering data on these properties, Sensytec can ultimately prevent potentially catastrophic cement failures in any structure.

Sensytec showcased their technology at the 2016 Offshore Technology Conference and is partnering with Baker Hughes.

**SES****Formerly SolidEnergy Systems | Massachusetts Institute of Technology | 2012 Competitor | www.ses.ai**

SES (SolidEnergy Systems) is the world's leading researcher, developer and manufacturer of Li-Metal technologies and products. SES can help you design, develop, build and test Li-Metal cells and modules to help you understand the potential of your future application. Of all the new battery technologies, Li-Metal not only offers 2X energy density, it has the best overall performance and is the closest to disrupting Li-ion.

Founder Qichao Hu was named to the 2012 Forbes list of 30 Under 30 in Energy. 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. They are based in Woburn, Massachusetts.

**Sightecho****The Hong Kong University of Science and Technology, China | 2018 Competitor | www.sightecho.com**

SightEcho is making the world's first smart diving mask with a transparent display. Diving information like depth and non-decompression limit are displayed in diver's line of sight.

**Simprint Nanotechnologies****Massachusetts Institute of Technology | 2009 Competitor | www.simprintnanotech.com**

Simprint Nanotechnologies Ltd. provides software tools and simulation services to users of nanoimprint lithography (NIL). The company offers an extremely fast way of simulating the nanoscale transformation of material involved in NIL. Its software allows semiconductor, photonics and data-storage manufacturers to use nanoimprint reliably and with greatly reduced development costs. Simprint software helps users to build intuition about the physics of the nanoimprint process, making it invaluable in nanoimprint lithography research.

Simprint Nanotechnologies is based in Bristol, England.

**SioTeX**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 U.S. 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 landfilling and field burning. SioTeX is headquartered in San Marcos, Texas.

**Skylark Wireless**Rice University | 2016 Competitor | www.skylarkwireless.com

Skylark Wireless designs next-generation last-mile wireless solutions for the R&D and fixed rural broadband markets.

The company develops rural broadband solutions to connect the next billion people with high-speed internet service. Skylark's proprietary base station is able to provide high-speed, multi-user data links over tens of miles wirelessly using the Massive-MIMO technologies first developed and demonstrated at Rice University.

Recently, Skylark has filed three international patents and installed a proof-of-concept network installation on the Rice University campus for research and development. The company received a Small Business Innovation Research Phase II grant from the National Science Foundation. Skylark is based in Houston, Texas.

**Smartenius**University of Delaware | 2018 Competitor | www.smarteniusinc.com

Newark, Delaware-based Smartenius is developing nanocomposite sensors with low cost and high accuracy. The value proposition of this quantitative structural health monitoring sensor is to rapidly detect and locate structural damage in large-scale structures before expensive repair is required, therefore decreasing maintenance costs. The company's objective is focused on the design, manufacturing and direct sales of sensors and the corresponding data acquisition systems with a custom interface.

**SmarterShade**

University of Notre Dame | 2011 Competitor

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 placed 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 co-founder 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 specifically to commercialize the technology from SmarterShade.

**Soko****Formerly SasaAfrica | Massachusetts Institute of Technology | 2012 Competitor | <http://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.

Their jewelry is also available through their own brick and mortar stores and at major retailers such as Nordstroms and Anthropologie. It can also be purchased on their website. Co-founder Catherine Mahugu is on Forbes’ 2016 list of 30 Under 30 in 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. They are one of the 10 global ventures selected to participate in the inaugural Girl Effect Accelerator. Soko has offices in Nairobi, Kenya and New York City.

Soltage**Yale University | 2006 Competitor | www.soltage.com**

Jersey City, New Jersey-based Soltage is a full-service renewable energy company developing, financing, installing, owning and operating solar power generation assets that provide electricity to commercial and industrial, educational, utility and municipal customers. The company has more than 50 solar projects and more than 150 MW of generation capacity under management across eight states and has deployed more than \$350 million into solar generation projects since 2006. Co-founders Vanessa Stewart and Jesse Grossman were finalists for Ernst & Young Entrepreneur of the Year, New Jersey in 2011.

Soltage was acquired by Tenaska Capital Management through an LBO in March 2015.

Sonodontics**University of Michigan | 2018 Competitor**

Sonodontics is the first-mover in the dental ultrasound imaging space and aims to replace the metal probe with a more accurate method. We have developed the first intra-oral ultrasound scanning system specifically designed to image the gums in a painless, precise, and time-efficient manner for early and reliable detection of gum disease.

**Speeko****University of Iowa and University of Chicago | 2019 Competitor | www.open.speeko.co**

Speeko is building an all-new way to improve public speaking skills, from seasoned Toastmasters to beginners. Officially launched in 2018, Speeko is now the number one public speaking app for tens of thousands of users around the world. They are headquartered in Chicago, Illinois.

**Spine Align****Johns Hopkins University | 2018 Competitor | www.spinealignsurgical.com**

Spine Align is developing a breakthrough, patent-pending imaging technology that enables on-demand, 3D, full-length measurements of a patient's spine with 95% reduction in time and 80% reduction in radiation exposure compared to current technologies.

**Spogen Biotech (dba Elemental Enzymes)****University of Missouri | 2012 Competitor | www.elementalenzymes.com**

Elemental Enzymes is a life sciences company focused on generating cutting edge solutions, ranging from organic solutions to biotechnological advances.

They use newly patented technologies and the latest scientific advancements to assist our customers in overcoming their challenges or creating new market opportunities. Through the use of their patented VersaShield® stabilization platform and other scientific breakthroughs, they develop biological products, stabilized enzymes, proteins, peptides and specialty chemicals that can address key market needs. Elemental Enzymes strives to bring new innovative ideas to market through its partnerships and is open to developing Elemental solutions for their customers.

In 2013, Elemental Enzymes began the commercialization of new products through its subsidiary, Elemental Enzymes Ag and Turf. The company continues to grow and has created new partnerships after launching its VersaShield® technology platform. Elemental Enzymes has submitted nine global patent applications and eleven national patent applications related to VersaShield® and its biological library. Elemental Enzymes is based in Columbia, Missouri.

**spotLESS Materials****Penn State University | 2019 Competitor | www.spotlessmaterials.com**

Based in State College, Pennsylvania, spotLESS Materials makes advanced materials for water sustainability and sanitation applications. Their coatings repel liquid, sludge, bacteria, and more. The team was part of the 2019 Summer cohort at Y Combinator and placed third at the 2019 Rice Business Plan Competition.

**SPOUTS 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.

SPOUTS is currently expanding their production plant in Uganda to have the capacity to produce more than 10,000 filters per month. They have provided clean drinking water to more than 80,000 people in 200 different communities across Uganda. The company is funded in part through a grant from the U.S. Agency for International Development.

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, honored with the 2016 SWITCH Africa Green-SEED Award, and participated in the Unreasonable Institute East Africa.

**Sproxil****Formerly mPedigree Logistics | Dartmouth College | 2009 Competitor | www.sproxil.com**

Sproxil® 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. Sproxil has also expanded into nonpharmaceutical industries including automotive, agribusiness, and fast-moving consumer goods. The company has exceeded 50 million engagements to date.

Founder and CEO Ashifi Gogo is listed on FORTUNE's 2015 list of 40 Under 40. Sproxil received the U.S. Patent and Trademark Office' Humanity Award in Information Technology. The company ranked number one in healthcare 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, Massachusetts, Sproxil continues to expand across Asia and Africa.

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

Stasis Labs offers a cloud-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.

On the heels of a recent round of venture funding, Stasis Labs will make their initial product launch in India where the barriers to market are less challenging than those in the United States. The company will use the capital to get clearance from the U.S. Food and Drug Administration, increase their manufacturing capacity and expand deployment in India.

Headquartered in Los Angeles, California, Stasis Labs was chosen as one of Inc. Magazine's Coolest College Startups of 2015. The company incubated in the TechStars Healthcare Accelerator at Cedars-Sinai. The company has successfully developed a cloud-based system to monitor vital signs in 12 Indian hospitals.

**Surgical Innovation Associates****Formerly SurgiNet | Northwestern University | 2016 Competitor**

Surgical Innovation Associates (SIA) is a medical device company rooted in Northwestern Kellogg School of Management and Feinberg School of Medicine. They produce bioabsorbable scaffolds for general and plastic surgery. The company's introductory product, Polydioxanone Tissue Matrix, is an absorbable mesh for breast surgery, hernia repair and a variety of other applications.

SIA is currently in pre-clinical trials. They tied for first at the Northwestern Venture Challenge in 2016.

**Swift Coat****Arizona State University | 2017 Competitor | www.swiftcoat.com**

Swift Coat makes the “aerosol can” for forming large-area nanoparticle coatings – a fast and precise method for depositing any nanomaterial onto any surface.

Swift Coat makes the “aerosol can” for forming large-area nanoparticle coatings – a fast and precise method for depositing any nanomaterial onto any surface. It is the only technology capable of independently and uniformly controlling film thickness (5 nm – 10,000 nm) and porosity (40% - 99%), opening up a new world of nano-enabled applications in the solar, display, healthcare and sensing markets. We offer access to our proprietary and patent-pending technology through either a contract-manufacturing or license agreement to help our customers scale up the production of their nano-enabled products, cutting time to market from years to months.

After winning fourth place at the 2017 RBPC, Swift Coat went on to become a finalist in Phoenix’s Venture Madness Competition in the Hardware Tech category.

**Syntr****University of California, Irvine | 2018 Competitor**

At Syntr Health Technologies® is dedicated to redefining personalized medicine. This company was born out of a collaboration between the Departments of Biomedical Engineering and Plastic Surgery at the University of California, Irvine. The team consists of passionate, problem-solving, and experienced individuals working to develop and optimize cutting-edge technology. They are committed to serving the community and bring forth an affordable, safe and effective therapeutic that will not only save limbs, but also save lives.

The multidisciplinary team with expertise in medical device design, microfluidics, 3D printing, immunology & molecular biology, medicine and plastic surgery. Syntr has a collaborative relationship with the Departments of Biomedical Engineering and Plastic Surgery at the University of California, Irvine.

**SYRG****Formerly Aday Technologies | Harvard University | 2018 Competitor | www.syrghq.com**

SYRG helps employers of shift workers build networks that unlock the potential of their former workforces. They are currently raising a funding round. SYRG is headquartered in Boston, Massachusetts. They placed third in the 2018 RBPC.

**Takachar****Massachusetts Institute of Technology | 2013 Competitor | <http://takachar.strikingly.com>**

Takachar is a for-profit company that represents a process and distribution model to produce and sell low-cost biomass-derived solid fuel in remote areas. They are focused on increasing the amount of biomass residues economically converted into useful products.

Currently, most of the biomass waste (farm/agricultural) that exists in remote areas cannot be economically converted into useful commodities. As a result, most farmers simply burn the post-harvest biomass waste in open air because there is little economic value in it. Takachar has developed a low-cost, decentralized, and patent-pending system that is able to economically convert the biomass waste on-site, cut down the transportation and processing costs and bring the fuel to those who are willing to pay.

Takachar was a 2013 MIT Clean Energy Semi-Finalist. Its co-founder, Sophi Ni, was named one of Forbes’ 30 Under 30 in Energy and Industry for 2014. The company launched a new website in January 2015 and published a report on a Lagos, Nigeria waste-to-energy project.

**Taxcient****Formerly vAudit Group | San Diego State University | 2004 Competitor**

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.

**TCPoly****Georgia Institute of Technology | 2017 Competitor | www.tcpoly.com**

TCPoly makes advanced materials for 3D printing technologies.

Based in Atlanta, Georgia, they have been awarded a National Science Foundation SBIR Phase 1 grant and participated in Atlanta's Engage Ventures Accelerator.

**Tembo Education****The University of Tampa | 2016 Competitor | www.TemboEducationGroup.com**

Based in Tampa, Florida, Tembo educates zero to six year old children in slums around the world, via mobile phones.

Their solution uses a high-quality, evidence-based curriculum to train and certify home educators (members of the urban slum community) to teach parents via SMS text messages. The parents then educate their children in their own homes. Tembo assesses the learning process through a quiz via SMS text. For educating their children and answering the quiz correctly, the parent is rewarded with free airtime (minutes and texts).

The company facilitates and expedites the economic development of the country by not only educating millions of children, but also by creating job opportunities, generating revenue for the telecoms and opening the doors to foreign investors.

Since competing at Rice, they won first place at Babson's pitch competition and won funding from a stint in the MassChallenge Accelerator. Tembo was one of 100 companies selected to attend Stanford's Global Entrepreneurship Summit hosted by President Obama, but they were only one of five businesses invited to pitch. Tembo concentrates its efforts in sub-Saharan Africa. They began in Nigeria but are planning to launch in a new country soon.



The Eye Tribe

Formerly Senseye | University of Copenhagen | 2012 Competitor

The Eye Tribe is an award-winning innovator of eye tracking technology and an OEM (original equipment manufacturer) 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. They combine their 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 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.

The Eye Tribe was acquired by Oculus in December 2016. Oculus is owned by Facebook.



TheraNova

Duke University | 2003 Competitor | www.theranova.com

Located in San Francisco, California, TheraNova is an experienced medical device developer with a track record of creating innovative and practical solutions to large markets with unmet needs. In their incubator, TheraNova pursues a rapid, highly capital-efficient process incorporating all the needed elements of medical device development in a shared services model.

Their technologies 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, Portrero 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 2014, founder Daniel Burnett was recognized as Emerging Medical Technologies Innovator of the Month in a report from Life Science Intelligence.



Treyetech

Johns Hopkins University | 2019 Competitor | www.treyetech

Treyetech has developed a novel device that eliminates the difficult aspects of the DMEK procedure for surgeons by modifying the surgical workflow and reallocating risk to skilled eye bank technicians. The Baltimore based company has received overwhelming support from corneal surgeons, the Johns Hopkins Center for Bioengineering Innovation and Design, and business collaborators.

**Tri-D Dynamics****Purdue University | 2017 Competitor | www.triddynamics.com**

Tri-D Dynamics designs and produces (via Cold Metal Fusion printing) smart metal pipes that sense temperature and pressure in harsh industrial environments. They are using the underlying manufacturing technology of their rocket engines to develop high-volume products for the energy industry.

Over the past year, the company created a proprietary Cold Metal Fusion process that allows for the seamless integration of electronics into metal. This enables real-time data collection in harsh environments where protecting the sensing technology is a requirement.

**TriboTEX****Washington State University | 2015 Competitor | www.tribotex.com**

Founded in Pullman, Washington by Dr. Pavlo Rudenko, Ph.D. CTO, TriboTEX offers a clean alternative to currently available lubricating blends that improve 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), American Society of Engineering and Education 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.

**TriFusion Devices****Texas A&M University | 2016 Competitor | <https://essentium3d.com>**

Trifusion fabricates custom 3D printed prosthetic and orthotic devices for the biomedical device industry, healthcare, military and commercial manufacturing industries.

They recently formed an exclusive partnership with a Silicon Valley 3D scanning company, allowing them to focus on printing and with Baylor College of Medicine, who is performing clinical trials on TriFusion's devices. TriFusion secured their first IRB approval and sold over 50 devices in the first month and a half of product sales. They expect to sell more than 3,000 devices in their first year, 2017. Rotary International has selected TriFusion to help deliver 3D printed prosthetic devices to clinics overseas. The company expects to deliver the first devices to a clinic in Tanzania before the end of 2017.

They won first place at the 2016 Rice Business Plan Competition.

In October 2016, Essentium Materials acquired TriFusion. The Essentium team competed in the 2010 RBPC as Whole Tree. They are headquartered in College Station, Texas.

**Tutorfly****University of California, Los Angeles | 2019 Competitor | www.tutorfly.org**

The Tutorfly team provides easy access to peer tutoring by collaborating with students, teachers, parents, as well as education technology experts in the community. Their tutors are current high school and university students who continue to excel at their studies and understand the way students of this generation learn. The best way for students to improve their academic performance is with a peer who underwent the same academic experience. Tutors can simultaneously raise money for a charity of their choice while receiving volunteer hours if they select to do so in lieu of payment. Tutoring starts at just \$25 an hour!

**Twine**University of Pennsylvania | 2017 Competitor | www.twinelabs.com

Based in New York City, Twine is people analytics software that helps Fortune 500 companies reduce employee turnover.

Twine's employee recommendation engine algorithmically suggests current employees for new job openings. By doing so, Twine helps employees find more fulfilling roles and companies save millions by tapping into their rich pool of existing talent.

In the last year, Twine has closed a seed round, hired their first engineers, and been accepted into Y Combinator. They participated in the National Science Foundation Innovation Corps program.

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

Tympanogen is a medical device company commercializing our proprietary gel technology for ear, nose, and throat uses. Their lead product, Perf-Fix™, will transform traditional tympanoplasty procedures into a quick office visit. Perf-Fix can be applied in an office setting within 10 minutes, without general anesthesia or margin freshening. This gel patch encourages regeneration of the full tympanic membrane structure at the same high success rates of traditional tympanoplasty. Perf-Fix is still in development and is not yet for sale.

The company has received grants from the NIH and the DOD as well as from Virginia Catalyst. They are featured NASA TV documentary. Tympanogen operates out of the VA Bio+Tech Park in Richmond, Virginia.

**Vascugenix**University of Arkansas at Little Rock | 2019 Competitor | www.vascugenix.com

Vascugenix is focused on developing innovative products to improve patient safety during interventional cardiology procedures.

Their FDA cleared Speed-Torque device uses a unique, patented design to improve the process of guidewire manipulation during Percutaneous Coronary and Peripheral Artery Interventions. The Speed-Torque provides physicians with the ability to manipulate catheter guidewires comfortably with one hand, allowing full attention on the patient and maintaining absolute control of the wire during the procedure. This shortens procedure time, decreases the amount of radiation both patients and physicians are exposed to, and decreases the risk of patient harm.

**VasoCorp**University of West Georgia | 2017 Competitor | www.neuropaway.com

VasoCorp commercializes innovative products focused on diabetic complications, the aging population, and the health and wellness market.

VasoCorp commercializes innovative products focused on diabetic complications, the aging population, and the health and wellness market. Our flagship product NeuropAWAY® Nerve Support Formula launched in 2015. NeuropAWAY® addresses the cause of neuropathy, including DPN, instead of just masking its symptoms. This represents a potential market of ≥\$3.0 billion in the U.S. and 15 billion overseas. NeuropAWAY® is currently in over 350 pharmacies and health food stores throughout the United States and Canada. We are also available on Amazon and other online sites.

VasoCorp's products are sold in H.E.B. stores and over 1,000 independent pharmacies. They were featured on Great Day, Houston.

**VenoStent****Vanderbilt University | 2016 Competitor | www.venostent.com**

VenoStent is medical device and biomaterials company that is developing a smart, resorbable polymer with many biomedical applications, the first of which is as a vein wrap to reduce vein collapse in dialysis patients. While hemodialysis serves as the primary lifeline for 460,000 kidney disease patients in the US, 40-60% of their access sites collapse and fail within the first year. This increases patient mortality to 50%, a coin flip, and costs Medicare billions each year. We're here to stop that. They are based in Houston, Texas.

**Veran Medical Technologies****Vanderbilt University | 2003 and 2004 Competitor | www.veranmedical.com**

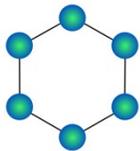
Veran Medical Technologies Veran is a privately held medical device company headquartered in St. Louis, MO. The company's mission is to empower physicians to diagnose cancer earlier and to enable precision therapy to save lives. In the United States, lung cancer kills more people each year than breast, prostate, pancreatic and colon cancers combined.

Veran has developed and commercialized an FDA cleared, next generation electromagnetic thoracic navigation platform called the SPiN Thoracic Navigation System™. Veran's breakthrough technology has been adopted by leading cancer centers throughout the United States. Veran provides physicians with a full line of bronchoscopic brushes, needles, forceps and steerable catheters with tiny electromagnetic sensors embedded in the tips for precise navigation. The combination of these proprietary Always-On Tip Tracked® instruments and Veran's exclusive patient respiratory gating technology enables physicians to accurately access lung nodules by accounting for nodule movement during patient breathing, a common challenge for lung specialists.

A significant funding round in late 2018 will be used to expand commercialization and innovation. The company was 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.

**Vibronix****Purdue University | 2016 Competitor | www.vibronixinc.com**

Vibronix is working with Purdue University and Boston University to develop a novel tumor localization and internal tracking device, AcouStar system. Studies point to the feasibility of the system for lumpectomy in cadaver sample. The results have been accepted by Light: Science & Applications. The company was awarded a National Science Foundation SBIR Phase 1 grant in June 2016.

**Viralchemistry****Tulane University | 2017 Competitor | www.viralchemistry.com**

Viralchemistry is a research-based biotechnology company. They are working to expand the pharmaceutical paradigm through the development of broad-spectrum antiviral medicines. The company was formed in part on the basis of work developed at Tulane University School of Medicine.

**Vita Inclinata Technologies****Mitchell Hamline School of Law | 2019 Competitor | www.vitatech.co**

Vita Inclinata Technologies develops the first autonomous Load Stability System (LSS) to eliminate the chaotic motion of loads during helicopter and crane operations. The LSS provides the ability to have direct control over any load during operations allowing for precise load placement and fly by wire capabilities.

Caleb Carr and Derek Sikora were named to Forbes 30 under 30 list for Manufacturing and Industry. The company were issued a new patent and were featured in Fox Business and ABC News. The Bloomfield-based company won the 2019 RBPC.

**WCB Robotics****Birla Institute of Technology & Science, Pilani | 2018 Competitor | <https://wcbrobotics.com>**

WCB Robotics is a robotics company which aims to provide robotic solutions to replace some of the most dangerous jobs. Their key innovations have been in the space of wall climbing robots. We have a patent pending for a new suction technology which is the most efficient and reliable non-contact fluid suction system in the world.

They are currently working on deploying their wall climbing technology for cleaning windows of skyscrapers. These robots will be able to stick to the glass facade, climb it and clean it, hence making them ideal instruments for window cleaning service provider companies.

WCB Robotics were finalists at the 2018 RBPC.

WiPower**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 provides software to make companies more efficient and deliveries more predictable. They help companies plan delivery routes, execute on routes through continuous optimization that responds in real-time to day-of changes, and improve over time through machine learning that uses data to inform future improvements.

The company was featured in a February 2018 story in FORTUNE. They are a Top 10 Techstars Mobility company and are based in Cambridge, Massachusetts.

**Wunderite****Boston College | 2018 Competitor | <https://wunderite.com>**

For insurance agents that want digital experiences, Wunderite is building next-generation agency management software that works like you would expect because it is built by technologists, insurance industry and business veterans. The company is part of Techstars Boston 2020.



xip

Formerly Silicon BioDevices | University of California, Berkeley | 2009 Competitor | <http://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.

The National Institutes of Health awarded xip a third grant in June 2017. They are also supported by NASA, XPrize, and the National Institutes of Health. They are headquartered in Berkeley, California.



Zibrio

Formerly iShoe | Harvard University | 2009 Competitor | www.zibrio.com

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

Zibrio has begun clinical trials. The company holds two issued patents on proprietary technology, delivering the first, all-encompassing human balance biometric. They have been featured in Xconomy, the TMC News, Houston Public Media and the Houston Chronicle. Zibrio is part of the Texas Medical Center's TMCx Accelerator's inaugural class and based in Houston, Texas.



Zilper Trenchless

Massachusetts Institute of Technology | 2019 Competitor | www.zilpertrenchless.com

Zilper Trenchless is a startup out of Massachusetts Institut of Technology (MIT) with a novel trenchless technology to install/replace water pipes without digging a trench, minimizing disruption to surface traffic while leading up to 40% savings.

Their lead product is a machine which uses a novel proprietary technology to install or replace pipes underground without needing to dig a trench. The company has already built and tested a first prototype (MVP) in a real project, achieving outstanding results that sparked the attention of potential clients, manufacturers, and other competing companies.

In 2018, Zilper Trenchless was awarded in the MIT 100K "Launch" Competition, MIT Sandbox Program and MIT DesignX competition. In 2019, the company was awarded at Imagine H2O Demo Day, placed fifth at the Rice Business Plan Competition and announced the sale of the first commercial prototype for an important piping project.

**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 announced in October 2016 that Time Inc. magazines will be syndicated through the Ziosk tablet. Publications include People, Sports Illustrated and Entertainment Weekly.

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.