Case: NonSpec

Dr. Jack M. Wilson, Distinguished Professor of Higher Education, Emerging Technologies, and Innovation



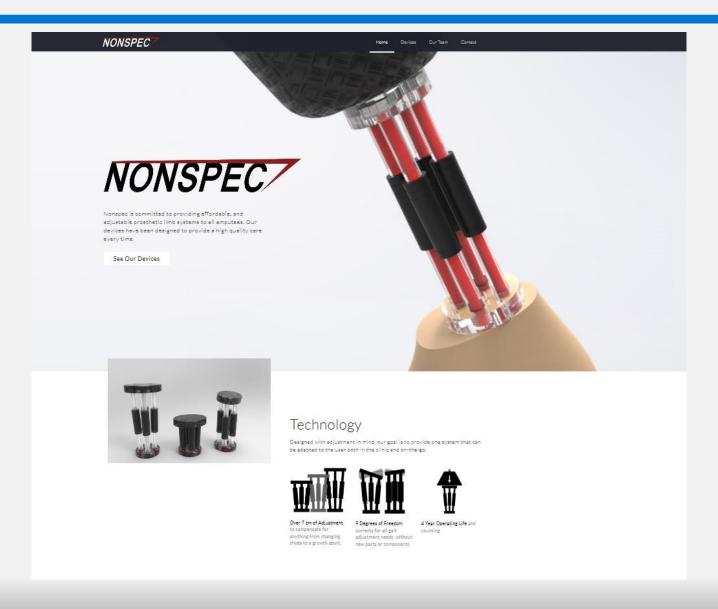
Nonspec -A student generated company

- Nonspec (previously known as Developing Nation Prosthetics) provides low cost, high functionality replacement limbs with an acceptable amount of customization for children in other nations.
- The team consists of Katherine Cain, Jonathan De Alderete, Brendan Donoghue, Sean Gibson, Olivia Keane and Erin Keaney with majors in plastics and mechanical engineering, as well as minors in business administration and history.
 - https://www.uml.edu/Innovation-Entrepreneurship/DifferenceMaker /Meet-the-DifferenceMakers/DM-Nonspec.aspx

(Photo: J.M. Wilson)



https://www.nonspec.org/



- Nonspec is a student generated company at UMass Lowell. Nonspec (previously known as Developing Nation Prosthetics) provides low cost, high functionality replacement limbs with an acceptable amount of customization for children in other nations.
- The team consists of Katherine Cain, Jonathan De Alderete, Brendan Donoghue, Sean Gibson, Olivia Keane and Erin Keaney with majors in plastics and mechanical engineering, as well as minors in business administration and history.
- Nonspec got its start by winning the Difference Maker Competition and went on to win many other awards such as becoming a top 10 semi-finalists in Entrepreneur® Magazine's "College Entrepreneur of 2013 Contest," and the First-Place award in The International Association of Plastics Distribution (IAPD) "Plastics Application Design Competition", held in October 2013 in Miami, Florida.
- As they realized that bringing a product like this to market in the United States would be very expensive, they traveled to India and developed a partnership to bring this to market there -with the hope of doing so in the US over time.

The founding team

- Jonathan De Alderete, CEO: Jon has a B.S. in Mechanical Engineering, M.S. degrees in business, and PhD in Biomedical Engineering and Technology focused on the amputee fitting process. His expertise is in mechanical simulation and analysis, business model development, and device prototyping.
- Erin Keaney, COO: Erin has her B.S., M.S., and PhD in Plastics Engineering. Her expertise is in medical device design, development, and manufacturing. She has 7 years experience in medical device companies and 5 years experience with startups.
- Brendan Donoghue, Engineer: Brendan has a B.S. in Mechanical Engineering, M.S. in Innovation and Technology Entrepreneurship. He has excellent SolidWorks skills and his main focus has been the designing, building, and testing of low cost medical devices.
- Later they added a team in India: Nilay Desai has a B.S. in Computer Science Engineering. His experience lies dealing with startup sales cycle. Nilay heads the Indian team and looks after sales and marketing. Sagar Honakeri has a B.S. in Industrial Production Engineering. He's in charge of clinic outreach and overseeing patient fitting in Karnataka region.

Nonspec

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- From the start, Nonspec showed dedication and enthusiasm by attending each DifferenceMaker educational workshop and event throughout the Idea Challenge process. The team participated in the 2013 first annual DifferenceMaker Idea Challenge where they received the prestigious title of "The Campus Wide DifferenceMaker" and the top award of \$5,000. This top prize represents the project most likely to make a significant difference in the community, region and the world.
- The \$5,000 award has allowed Nonspec to move their initiative forward by creating their first batch of prosthetic limbs. With a projected 15% market share in the next five years. Nonspec plans to use this market presence to launch a foundation called "Give a Hand." The purpose of this foundation would be to spread their mission, goals, charitable cause, and products around the world in order to make a difference in developing nations.



Erin Keaney - Nonspec - 2018 Finalist for North America

https://www.youtube.com/watch?v=LZUu YGA5Pg



DRIVING CHANGE BY EMPOWERING WOMEN ENTREPRENEURS

I'm Erin Keaney, COO and Co-Founder of NONSPEC.



Taking the innovation to those who need it.



Limbs lined up to be given to users



Amputees at the Indian Institute of Management in Bangalore



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We interacted with the Karnataka State Commissioner for Persons with Disabilities, Mr V. S Basavaraju and many interested participants at our booth during the educational event on Inclusion held in Mysuru. He is supporting us in organizing camps in the Tier-2 & Tier-3 cities of Karnataka. We sincerely thank him for his support and guidance!









- Since Nonspec's success at the Idea Challenge, they have gained great publicity in other arenas.
- They were recently named one of the top 10 semi-finalists in Entrepreneur® Magazine's "College Entrepreneur of 2013 Contest."
- In addition, they attended The International Association of Plastics Distribution (IAPD) "Plastics Application Design Competition", held in October 2013 in Miami, Florida. They won first place, receiving \$1,000 and additional promotion for their project. They had 20 minutes to present their project to an audience and answer any field questions that arose.
- Due to the team's motivation and high entrepreneurial spirits they were utilized as a role model by being featured in a video that was shown at all DifferenceMaker freshman orientation sessions throughout the summer.



Erin, our COO won both 1st and fan favorite last night at the #WITPitch by EforAll Lowell-Lawrence! Thank you all who attended for supporting local women in tech and for voting! We cannot wait to fit more patients with the prize money!



Entrepreneurship: © 2012 ff -Jack M. Wilson Distinguished Professor

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- In November, Nonspec was invited to the Unites States Patent and Trademark office in Alexandria, Virginia to compete in the 2016 Collegiate Inventors Competition. Teams from around the country submitted their research and designs and 6 graduate teams and 5 undergraduate teams were chosen to present to the judges, inductees the Inventor's Hall of Fame.
- It was amazing to see the great projects that are being developed at other universities and for the chance to talk with like-minded scientists who are seeking to change the world. We were all able to explore the USPTO National Inventor's Hall of Fame Museum and present in the USPTO building to staff and the public before the award ceremony! We were honored to receive silver metals during the ceremony and are thankful for the support we received from the community.
 - From the Nonspec website



Mass Challenge

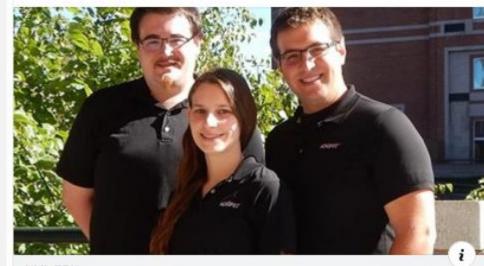


- Nonspec was accepted into MassChallenge Boston in 2017.
 - MassChallenge is the world's largest startup accelerator with a focus on the facilitation of high-impact, world-changing ideas.
- In the MassChallenge process they worked with other teams in the collaborative space and fabrication lab to take advantage of networking with other startups and to refine their own plans.

https://masschallenge.org/programs-boston



UMass Lowell startup Nonspec, which makes low-cost prosthetic limbs for people in developing nations, just landed a \$50,000 prize from Boston-based business accelerator MassChallenge.



UML.EDU

UML Startup Nets \$50K Grant from Accelerator Program

How do you take the world by storm while lending it a hand? The...

From UMass Lowell website

- 11/30/2017
- By David Perry
- How do you take the world by storm while lending it a hand?
- Jonathan de Alderete and Erin Keaney are finding out. The duo, co-founders and partners in Nonspec Inc., an emerging business that is making affordable prosthetics, landed a cool \$50,000 prize as one of the Top 26 startups at MassChallenge, the Boston-based business accelerator.
- Nonspec, which makes low-cost prosthetic limbs for people in developing nations, is perhaps the best-known calling card of UMass Lowell's DifferenceMaker program. It was named the first campus-wide DifferenceMaker winner in 2013, earning a \$5,000 purse.
- It didn't end there. Since then, their adjustable, injection-molded prosthetic limbs have been refined and improved. They have raised \$350,000 in grants and competitions, and they now have a staff of six three in the U.S. and three in India, home to one in five of the 3 million people who undergo amputations.
- Sales have just begun.
- Senior Associate Vice Chancellor Steve Tello says MassChallenge is a "highly respected, highly competitive" program that received 1,500 applications from companies around the world for 128 seats in the business accelerator. For four months, participating startups have access to corporate partners, expert mentors and more than 26,000 square feet of shared workspace in Boston's Innovation and Design Building. They also have access to a research and development lab for designing and building prototypes.
- Nonspec began sales in India a month ago. Presales put the company on track to meet 2018 sales goals, said Keaney: "We plan to break into the U.S. market next year and are exploring expansion into the Philippines and Rwanda as well." They will continue to seek funds, with a goal of raising \$700,000 over the next 18 months, to allow Nonspec to scale up manufacturing and hire staff.

Questions

- Team: Is the founding team both compatible enough and diverse enough to be successful?
 - If you were to advise them on adding team members, what would you advise them/
- They have been extraordinarily successful in winning contests and raising funds through prizes. Will this be enough for the future? What else do they need to do?
- Do you see this as more of a for-profit enterprise or as a social enterprise that could be either for profit or nonprofit?
 - What would you advise them in regard to that?
- Why do you feel they pivoted to target the market in India and Asia?