

About the Editor



Khanjan Mehta is the founding director of the Humanitarian Engineering and Social Entrepreneurship (HESE) Program and assistant professor of engineering design at Penn State. HESE is an integrated learning, research, and entrepreneurial engagement program focused on developing and commercializing technology-based solutions in resource-constrained settings. Mehta has led technology-based social ventures in Kenya, Tanzania, India, Mozambique, Zambia, Sierra Leone, and other countries. These ventures range from telemedicine systems and ruggedized biomedical devices to affordable greenhouses and solar food dryers.

Mehta's research interests encompass affordable design; systems thinking; social entrepreneurship pedagogy; agricultural technologies and food value chains (FVCs); global health and telemedicine systems; cellphones, social networks, and trust; indigenous knowledge systems; development ethics and grassroots diplomacy; women in engineering and entrepreneurship; and informal lending systems for microenterprises. The objective of these research endeavors is to democratize knowledge and mainstream HESE as a valid, rigorous area of learning, research, and engagement. He has published over one hundred journal articles and refereed conference proceedings with about forty more in the pipeline. Mehta serves as an associate editor for the *IEEE Technology and Society Magazine* and as a contributing editor for the Engineering 4 Change portal. Mehta publishes a daily cartoon series called *Frame Changers* that captures learning moments in HESE and sustainable development.

Mehta has served on several university-wide and international committees and task forces. He has delivered invited talks and keynote speeches on technology innovation, social entrepreneurship, and global sustainability at several universities and international conferences. The HESE program was the recipient of the 2013 W.K. Kellogg Foundation Engagement Award (Northeast Region) from APLU, 2011 Outstanding Specialty Entrepreneurship Program Award from the US Association for Small Business and Entrepreneurship (USASBE), and was named by *Popular Mechanics* as one of thirty "Awesome College Labs" across America. While these are good accolades, Mehta's primary focus is on the HESE ventures that his students are striving to build up to multimillion smile enterprises.

Mehta lives in State College, Pennsylvania, with his parents; wife, Toral; and daughter, Tashvi.

The Editorial Team



Irena Gorski is an ecosystem manager for the Council on Engaged Scholarship at Penn State, designing and testing lean, scalable models to expand opportunities for engagement and engaged scholarship for students and faculty. Prior to working for Penn State, she graduated from the university's Schreyer Honors College with a BS in geoscience and worked for an environmental consulting company remediating contamination throughout the tri-state area. Irena was responsible for writing up the innovator profiles in collaboration with the participants and Khanjan Mehta as well as editing the other sections of the book and contributing to the layout design. She considers herself extremely lucky to have been brought into this project because each of those one hundred innovators have inspired her to forge a nontraditional career path of her own at the intersection of public health, nutrition, water resources, and food security.



Siri Maley is a recent graduate of Penn State's Schreyer Honors College with BS degrees in mechanical engineering and political science. She was actively involved with HESE with work spanning from design and in-country construction to venture and curriculum development. Over the last several years, she has authored, presented, and edited numerous articles across HESE's wide range of global health and food security portfolio. She greatly enjoyed working on the book, including aggregating content for many of the expert briefs, editing several innovator profiles, and contributing to the layout design. Siri aspires to use her background in HESE design and development to pursue a career at the intersection of engineering design and change management. She is currently teaching high school science in rural Guyana as a WorldTeach corps member.

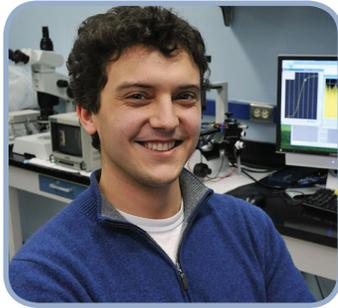


Rachel Dzombak is a graduate student in the Laboratory for Manufacturing and Sustainability at the University of California, Berkeley. Prior to attending Berkeley, Rachel graduated from the Penn State Schreyer Honors College with a BS in biomedical engineering. While at Penn State, she actively participated in the HESE program for four years. Rachel's work is focused on integrating the knowledge and ideas of multidisciplinary stakeholders to build entrepreneurial ecosystems. Her research interests include manufacturing productivity in developing countries, social impacts of global supply chains, and mechanisms of eliminating waste from production cycles. Rachel identified and connected many potential participants from diverse circles and assisted in editing the final career profiles and expert briefs. Rachel aspires to teach entrepreneurship and design to undergraduate engineers. She is proud to be part of this book as it includes individuals that set incredible examples for the next STEM generation.

The Editorial Team



Jennifer Dobson is a junior honors student studying neuroscience at Penn State. As part of HESE, she develops low-cost screening tools for sub-Saharan Africa. Jennifer was responsible for editing career profiles. Jenny feels lucky to have been a part of this project because it has exposed her to a range of role models and career paths. She plans to attend medical school and use her degree to advance her passions of neuroscience, women's rights, and global health.



Nick Frazzette is currently pursuing a combined BS and MS program in biomedical engineering at Penn State through the Schreyer Honors College. As part of HESE, he is involved in low-cost screening tools. Nick edited several innovator profiles. He intends to attend medical school and ultimately combine expertise in biomedical engineering, design, and clinical research to bring new innovations in global health.



Kelli Herr is an undergraduate student majoring in community, environment, and development at Penn State. Kelli is a part of the HESE Program and focuses her studies on indigenous knowledge and international development. Kelli was responsible for transcribing interviews and editing career profiles. She is grateful for the opportunity to work on this project because she feels like it has opened her eyes to some of the realities of the field she wishes to enter.



Shannon Hutchinson is an ecosystem manager for the Council on Engaged Scholarship at Penn State, testing lean, scalable models to expand engaged scholarship opportunities for students. Shannon is grateful for the chance to work on this book and truly believes this will help students get the most out of their college experience and plan their paths ahead. She was responsible for aggregating content for the expert briefs. She aspires to continue working in higher education within the realm of athletics.



Krista Liguori is a recent graduate of Penn State's Schreyer Honors College. Throughout her two years in HESE, Krista worked on a nutritious street food venture, conducted research in Kenya, and aided in teaching a social entrepreneurship course. She edited several profiles featured in this book. Krista begins her master's program in international health at Johns Hopkins this fall. She intends to work on epidemiological control in places with high human rights violations.