Creating your own career path will become increasingly important because, according to the US Bureau of Labor, the US is producing more STEM professionals than the economy demands. Despite this somewhat alarming trend, traditional collegiate STEM departments (in particular for this talk, Chemistry and Chemical Engineering) rarely teach the basics of innovative discovery and business creation that our graduates need to “be their own bosses”. In this talk the author will discuss the creation of a medical device firm, Cohera Medical, whose products are molecular (rather than mechanical) in nature. While chemistry and chemical engineering were at the heart of Cohera’s business plan, knowledge of a variety of disciplines was required to move the product from beaker to FDA approval. Business success required knowledge of both non-technical subjects, such as project management, and technical issues, such as dealing with trade-offs, that are typically not addressed as part of traditional chemical sciences curricula. As traditional arms of the chemical enterprise require fewer workers to thrive owing to automation and other efficiencies, it may very well be small companies that maintain the vibrancy of the industry. As such, it is incumbent upon students to take advantage of the richness of university offerings to learn as much as they can about “being their own bosses”.

**BIO**

Eric Beckman received his Ph.D. in polymer science and engineering from the University of Massachusetts-Amherst in 1988. After postdoctoral research at Battelle’s Pacific Northwest Laboratory in 1987-88 on emulsion polymerization in supercritical fluids, Dr. Beckman assumed his faculty position at the University of Pittsburgh (1989) and was promoted to associate professor in 1994, and full professor in 1997. He received a Young Investigator Award from the National Science Foundation in 1992, and the Presidential Green Chemistry Award in 2002. His research group examines the use of molecular design to solve problems in green engineering and in the design of materials for use in tissue engineering. In 2003, with support from the Heinz Endowments, the Bevier estate, and John Mascaro, He created the Mascaro Center for Sustainable Innovation, a school of engineering institute that examines the design of more sustainable infrastructure. He is also the co-founder of Cohera Medical, Inc., a biomedical device firm which has created and commercialized TissuGlu, the first internal tissue adhesive to receive US FDA approval.

---

**Eric Beckman, Ph.D.**

Bevier Professor of Engineering  
Chemical & Petroleum Engineering Department  
University of Pittsburgh

---

**Friday, April 6, 2018**  
SEH B1220  
2:00-3:00 pm  
Refreshments will be served at 1:45 p.m.