

James H. Hyde

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Objective:

To take valuable, novel medical devices to market.

Work Experience:

Senior Product Design Engineer, Poly-Med Inc. Anderson, SC 2016-Present

- Brought multiple medical devices to market in the urology, gastroenterology, and neurology spaces.
- Interacted with customers as a technical expert to demonstrate the value add of our product suite and drive business to the company.
- Developed bench top model to mimic device failure saving a >\$500,000 for a follow up clinical trial
- Managed a scale up of the washing, cleaning, inspection, drying, and packaging of a bioresorbable mesh from 20,000 units to 60,000 units.

Product Design Engineer, Poly-Med Inc. Anderson, SC 2013-2016

- Managed a six figure scale up of an electrospinning process from lab scale to 20,000 units a year and >\$1,000,000 in revenue including design and production of custom machinery.
- Used Six Sigma methodology to implement process improvements that reduced production life cycle from three weeks to two weeks.

Education:

M.S., Bioengineering, Clemson University - Major GPA 4.0/4.0 2012-2016

B.S., Bioengineering, Clemson University, Magna Cum Laude 2008-2012

- Calhoun Honors College, Departmental and University Honors

African History, Clemson Study Abroad, Cape Town, South Africa May 2011

Global Economics, University of Sussex, Brighton, England Summer 2009

Academic Experience:

Master's Thesis Research – Nagatomi Lab – Clemson University 2012-2016

- Designed and prototyped biodegradable ureteral stent
- Completed Master's Program while working fulltime

NASA Space Grant - Wen Lab- Medical University of South Carolina Summer 2011

- Synthesized and characterized a variety of nano-particles

NASA Space Grant - Huang Lab - Clemson University Summer 2010

- Explored the microfluidics of droplet formation, jetting, and cell encapsulation for tissue engineering

Honors and Awards:

Clemson University National Scholars 2008-present

- Most prestigious merit-based scholarship offered at Clemson

Tau Beta Pi 2010-present

- Engineering Honor Society

NASA Space Grant 2011

- Studied nano-hydroxyapatite and fluorescent nano-particles

NASA Space Grant 2010

- Studied the microfluidics of droplet formation for tissue engineering

Skills:

Programming in Matlab, C++, and SAS

Solids Works (Certified Professional)

Imaging including Fluorescent, Confocal, and TEM

Minitab

In Vivo Studies (Rat and Pig)

Material Characterization (IR, GPC, TGA, and DSC)

Cell Culture and Aseptic Technique

Microsoft Office Including Advanced Excel