

# STEM SPOTLIGHT

## Valerie Huery

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*Currently on assignment in Sydney, Australia*

Bachelor of Science in Biomedical Engineering– University of Memphis  
Master of Science in Engineering Management–  
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**Q: How did you select your college major?**

**A:** I had original plans to attend medical school, and I wanted to have a technical acumen so that I could play both a technical and clinical role in improving healthcare and medicine. I originally learned of biomedical engineering during a summer program I attended for students interested in STEM fields held at the University of Tennessee at Knoxville. I felt that by choosing biomedical engineering as my undergraduate major, I would get a solid foundation that would help me transition into either a technical or clinical role.

**Q: What was the biggest influence in your selection of major/career?**

**A:** Selecting biomedical engineering allowed to me to interface technical concepts with scientific principles. While still in high school, I researched what industries would have significant growth in the next ten years and biomedical engineering was one of the top areas, along with many other areas of STEM. The advancement of medicine and healthcare was growing not only at a national level but also at a global level, and to be a part of that growth was a major influence in my selection.

**Q: If you could go back to high school and select any elective course to take that would have better prepared you for college, what would it be?**

**A:** AP Biology and AP English. During college, I found a strong foundation in biology made learning the technical aspects a bit easier. As for AP English, I think a strong foundation for writing and reading comprehension is often under-emphasized. It makes learning new concepts as well as preparing written information much easier, which is constantly required, no matter what industry you work in.



**Q: What's the most interesting thing you have been able to do in your career?**

**A:** For the last two years, I have been the regional managing engineer for the Australian and New Zealand markets and based in the Memphis, TN office where I designed patient matched cutting blocks. We recently hired a local engineer in the Sydney, Australia area, and the company sent me to train her on our processes. It has truly been an incredible experience. I have gotten to work with other Smith & Nephew colleagues who are based in the Australia and New Zealand offices as well as meeting so many of the surgeons and sales representatives that I have worked closely with for over two years. As the world becomes much more of a global community rather than smaller individual communities, I feel that international exposure can only increase your opportunities and knowledge.

**Q: What is your favorite aspect of your job?**

**A:** In my role as a product development engineer, I work with surgeons and sales representatives in creating a patient matched cutting block used during a total knee arthroplasty. This is done by using the patient's individual anatomy and implementing a surgeon's preferences into the block design. This is very interesting as I get to work with so many surgeons and patients. My favorite aspect would be going out into the field and seeing the cutting blocks used during surgery. Knowing that your design has played a positive role in this patient's surgery and actually seeing it can be incredibly rewarding.

**Q: How do you/your company make a positive impact on society/our community?**

**A:** We are striving to give patients a better quality of life through our various innovations in healthcare and medicine. It is so rewarding when you meet someone and tell them where you work, and they have a story of how the company's products have improved their quality of life.

**Q: What makes you get up each morning excited about your profession?**

**A:** When you meet people who have been positively affected by biomedical innovations, it makes it so much more rewarding to be a part of this industry.

**Q: What advice would you like to share with K-12 students who are considering your profession?**

**A:** Challenge yourself and learn as much as possible. Do not avoid taking certain classes because they are difficult or you find it hard to see how they are immediately applicable. Align yourself with people in your field of interest; it will help tremendously as you transition from a college student to a professional.

