

Longtime VA Collaborator recognized with adjunct professorship

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Tulane Biomedical Engineering (BME) welcomes adjunct professor Mr. Brian Layman. Brian began interacting with the department in 2018 to discuss new internship opportunities for undergraduate students. Mr. Layman's work at the New Orleans VA Medical Center developed during years of work with amputees beginning in 1995 with his own father and then working in the family-owned prosthetics business,

Innovative Orthotics and Prosthetics. Mr. Layman worked in the family business for almost 20 years and during that time completed an Associate of Applied Science in Orthotics and Prosthetics from Oklahoma State University in 2003. Between 2012 and 2014 he co-founded Nola 3D Printing where he began developing his expertise in 3D printing. As Brian's interest in 3D printing and prosthetics has expanded, he has become part of the VA system's top experts in 3D printed prosthetics. It is his work with developing novel 3D printing methods to minimize production time for veterans receiving new or modified prosthetics that has involved the Tulane BME students. One of the first projects with BME allowed several students the opportunity to design and create new aquatic prosthetics for rehabilitation and recreation. A recent collaboration with BME students has culminated in the development of a new device to assist amputees with putting on a liner, the interface between a residual limb, and a custom-designed prosthetic, more quickly and accurately. That design is in the advanced stages of development and under provisional patent protection as it continues to move through the United States patent granting process.

Mr. Layman is an active member of the national VA 3D printing group elevating him into an elite group that continues to explore new and novel methods of patient-centered prosthetic design and implementation. Brian's contributions to the 3D printing of prosthetic devices have earned him recognition and inclusion into groups that are writing and editing the national and international standards for prosthetic design and testing. Brian's work with 3D printed prosthetics and contributions to national and international standards places him at the forefront of the 3D prosthetics field.

Mr. Layman continues to develop a strong working relationship with the Tulane Department of Biomedical Engineering where he has mentored over a dozen students ranging from sophomores to graduate students. Brian has broadened students' horizons and enhanced the industry expertise of faculty over the past seven years, and the department is fortunate to have him involved in this new role.