

Medical Device Development: Things to know before you leap!

Nina McLain

The University of Southern Mississippi, Nurse Anesthesia Program Administrator, Hattiesburg, Mississippi

Abstract:

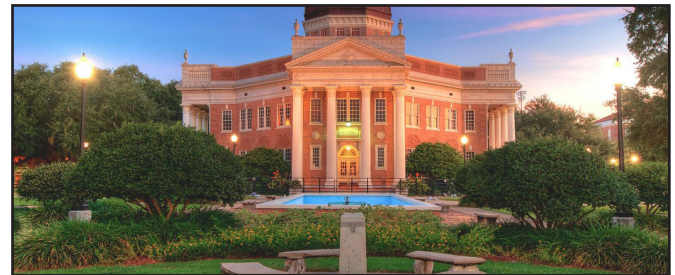
Nurses are by nature entrepreneurs although we don't typically think of ourselves in this manner. A gap exists in nursing provider knowledge on the process and pathway to medical device development. This talk will highlight the pathways to production that are required and suggest partnerships that are little known to care

providers to facilitate device development. This presentation outlines the steps and stages of device development from protecting intellectual property to licensing and manufacturing the product. This will provide a guide for those interested, who have ideas for medical devices or improvements on current devices. Very limited literature is available on the entire process and as this area is not one typically taught in nursing programs, a knowledge deficit is present for potential inventors or entrepreneurs.

The development process will be brought to light and offer suggestions on common areas where stumbling blocks persist, such as funding and licensing in the later stages of development. The desired state is one that allows nurses a beginning to moderate level of knowledge on the process and pathways to be successful in medical device development from one patented developer's, nursing

Biography:

Nina McLain is a practicing nurse anesthetist, associate professor and program administrator at The University of Southern Mississippi (USM). Her clinical practice gave rise to the idea for a device to prevent aspiration in ventilated and anesthetized patients and started her on the pathway of medical device development. Her project is now in the preclinical testing phases after securing both a United States and an international patent. Her nursing



career spans 36 year as a nurse and 28 years as a nurse anesthetist. She has received grants for breast cancer research, nurse anesthesia traineeships, and medical device development. In 2017, she formed a company with USM to produce and market the oral suction medical device. Dr. McLain is passionate about patient safety and healthcare quality improvement and encourages any nurse with the passion and drive to develop their idea to pursue it, but with full knowledge and preparation of the requirements.

Publication of speakers:

1. CLINICAL PREPARATORY SIMULATION PROJECT FOR THE UNIVERSITY OF
2. SOUTHERN MISSISSIPPI DOCTOR OF NURSING PRACTICE NURSE
3. ANESTHESIA PROGRAM, 2019.
4. Effective Teaching Modalities in Nurse Anesthesia Pharmacology, 2019.
5. Clinical Application: A Cost-Benefit Analysis of Sugammadex Versus Neostigmine for a North Mississippi Delta Hospital, 2020.