



## Peter Santa Maria, The University of Western Australia, Australia

### Bio:

Dr Santa Maria is a clinician scientist at The University of Western Australia after moving from Stanford University in 2015. Clinically he is an ENT surgeon with a sub specialty in Neurotology and skull base surgery. His focus is on translational medicine and commercializing medtech and biopharma. Currently he is a director at SPARK Co-Lab and one of the Founders and Chief of the scientific advisory board for Auration Biotech (Hearing Pharmaceuticals) as well as Founder and Chief Medical Officer for Flo-therm (Perioperative warming device). His basic science research efforts focused on tympanic membrane wound healing. Since then he has developed novel animal models to study chronic tympanic membrane perforation and chronic suppurative otitis media. His novel research into a treatment for tympanic membrane perforations was accelerated through the SPARK program at Stanford University into Auration Biotech. On the medical device side he, along with a group in Stanford's Biodesign class, developed a novel medical device for maintaining perioperative temperature. He acted as Principal Investigator for this device in its first in man trial at Stanford University. Based on the success of this trial the device is now being developed within Flo-therm. He also is an active consultant for a number of Bay Area medical device companies. As a director of SPARK Co-Lab he is dedicated to medical discovery and translation through to the clinical stage.



### Presentation Title:

*Medical Device Innovation Session (Presented by SPARK Co-Lab)*

### Abstract:

SPARK Co-Lab is a collaboration between the universities and medical research institutes in Western Australia in affiliation with Stanford University's SPARK program. It provides an ideas design course, mentoring, project management and ecosystem building events to translate medical discoveries to commercial outcomes (start-ups, licensing and clinical trials). The SPARK Design course facilitates teams to create medical devices from needs identification in clinical areas to ideation. It then develops business strategy to implement the concept and facilitates investment in the team's start-up. This session will present part of the process and discuss a case study of a recent alumni team, who is collaborating with biophotonics engineers in how they discovered their clinical need and are executing their solution through the translational pathway. An exercise in brainstorming will also give core skills to participants when facing challenges in ideation.