



## 3 Things You Should Know About Oliver Schumacher

Prior to joining Protembis, Oliver was a co-founder of CircuLite®. As Director of Operations, Oliver helped develop the groundbreaking SYNERGY® Circulatory Support System, the world's first micro-pump for partial support of chronic heart failure patients.



Oliver Schumacher  
Chief Technology Officer

### 1: OLIVER IS A MEDTECH INDUSTRY VETERAN.

Thirteen years ago, Oliver was a Founding Member of CircuLite. As Director of Operations for the start-up, he helped oversee and launch Synergy, a partial support system for the heart that offered the potential of a new minimally invasive treatment paradigm for patients with chronic heart failure who were not responding to standard medical care. The system's less-invasive implant procedure was designed to reduce the surgical risks associated with implant procedures that required cardiopulmonary bypass support. Oliver continued at CircuLite for nearly 11 years with significant responsibilities: designing Synergy to meet user requirements for partial support of the human heart; managing verification and validation processes; developing production strategies and environments to ensure reproducible manufacturing outcomes under GMP requirements; implementing and maintaining a quality management system. CircuLite was acquired by HeartWare® in 2013.

### 2: OLIVER IS INVIGORATED BY THE PROTEMBIS START-UP SPIRIT.

"The first time I met Karl and Conrad there was an extraordinary recognition of mutual appreciation for the diverse and complementary skill sets we have," he recalls. "You could almost feel the entrepreneurial spirit perfusing us. It was energizing, revitalizing for me, recalling the early days at CircuLite. From the start it was obvious to me that Karl and Conrad share the primary requisite for a successful start-up: They were passionate about what they were trying to build," says Oliver. "I soon learned that we were all of the same mindset, that we are always questioning how we can do things better. I was also immediately impressed that Karl and Conrad are optimistic personalities by nature. And, like all successful founders, they have a high affinity for mitigating risk. And above all, I have joined a team that, day in and

day out, *executes*. All of these qualities italicize the entrepreneurial spirit at Protembis for me."

### 3: OLIVER HAS HIGH EXPECTATIONS FOR PROTEMBO®.

"My expectation for ProtEmbo is that it will become the standard complement to TAVI procedures," says Oliver. "We have designed ProtEmbo to be easy for cardiologists and surgeons to use, thus facilitating quick deployment. Also, ProtEmbo can be competitively priced because it is economical to produce. Furthermore, ProtEmbo is designed to deflect the tiniest of debris, as miniscule as 60 microns or the diameter of a human hair, which is decidedly superior compared to the competition's deflection or capture capabilities. For these reasons, ProtEmbo will have great appeal for clinicians."