## Examples of Industrial Solutions to Material Problems SuPing Lyu Medtronic Inc.

Biomaterial research has been carried out for many decades. Yet, there are many unmet needs for developing medical devices and biotechnologies. Some of these unmet needs are "old" and tough ones. Some of them come from the developments of the new devices. The things in common are that there usually is no suitable material immediately available for the engineers to use. However, industrial scientists often could find ways to solve those challenging problems by using very simple approaches. The purpose of this presentation is to provide a few examples to show the thought processes behind the innovation. The examples included are (1) steroid releasing pacing leads, (2) drug delivery pumps, and (3) sorbents based hemodialysis. These technologies have made significant impacts on the biomedical industry.