SuPing Lyu
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Host: Thomas Webster
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Products, Engineering, and Science

Friday June 27
315 Shillman Hall
11:45 a.m. – 1:00 p.m.

Refreshments will be served

ABSTRACT The purpose of doing research in industry is for developing products. Results are measured by whether the customers are satisfied. This is different from research activities in other professional areas. Although pursuing scientific discovery is not a primary purpose of industry research, industry activities do have initiated a lot of fundamental problems. It is a driving force to advance sciences. In this talk, the speaker will share his experience of doing technical work in industry. The following topics will be discussed:

- Introduction to Medtronic
- Product development: business, therapy, engineering, and science.
- Developing materials for new products using polymer coating of drug eluting stents as an example.
- Solving device product problems with pharmaceutical approaches.

The message is that understanding the purpose of doing research is as critical as doing research itself.

BIOGRAPHY SuPing Lyu received his B.E. from Tsinghua University in 1991 and Ph.D. from the University of Minnesota in 2000. Both are in chemical engineering. He joined Medtronic as a materials scientist in 2000 and was elected to Technical Fellow in 2008. Currently, he is a Senior Principal Scientist. He has experience in developing materials and related technologies for cardiac, spinal, vascular, and renal disease management products. He has served on industrial advisory boards for multiple institutes. He was invited to attend the US National Academy of Engineering Frontiers of Engineering Conference. He authors over 25 peer-reviewed papers and has given many invited and graduate student seminar talks. He has a number of patents that help the market-release of several medical products to serve hundreds of thousands of patients. SuPing's current focus is on reliability prediction of medical implants by applying first principles and regulatory guidance.

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