

SRAI AM Presentation – A. Fong

Tuesday, Oct 29, 2024

Session T509: What Does it Really Take to Go from “Bench to Bedside” – One Small Institution’s Experience

CASE STUDY 1 – LOCAL MACHINING AND FABRICATION COMPANY

Background

- In 1969, Co. A was contracted by TRIUMF to help build its now flagship cyclotron (particle accelerator), which is a 500 MeV machine.
- A purchase agreement was signed and Co. A was to supply TRIUMF with magnets and other components.
- Company A also supported TRIUMF in its proposal to the Canadian federal government to fund its operations at that time.
- In 1989, Co. A established a subsidiary, Sub B, to formally license the technology from TRIUMF to build commercial cyclotrons for the nuclear medicine community. As consideration for the license, Sub B was to pay royalties to TRIUMF from sales of the units. In the same year, Sub B built a small scale cyclotron for TRIUMF’s own nuclear medicine program.
- Soon after Sub B was established, it engaged TRIUMF under a services contract to help it deliver the first commercial cyclotron to a customer in Taiwan. This commercial unit is a 30 MeV machine. The contract was for TRIUMF personnel’s services and included:
 - Review of designs and drawings
 - Engineering support – electrical and mechanical
 - Computer simulations, programming of hardware and software controls
 - Commissioning of the machine at the customer site
 - Etc.
- During the term of the services contract, TRIUMF staff were allowed to charge their hours with no prior approvals from Sub B. This ended up in a “he said, she said” situation.
- In the ensuing years, sales was slow and no royalties were returned to TRIUMF. Sub B then applied for R&D tax credits, which enabled them to pay TRIUMF some of the outstanding royalties. In the mid 1990’s, TRIUMF decided to terminate the license agreement due to Sub B not meeting sales and royalty milestones.

The Conflict

- In 1995, a TRIUMF trained PhD student obtained his PhD, then did his postdoctoral studies at Sub B. Subsequent to that, he started his own private company, Startup C, to commercialize a number of cyclotron components. This was vetted by Sub B and no objections were raised.

- In the intervening years, the relationship between Sub B and TRIUMF had deteriorated, with each side blaming the other for trying to take advantage of the early relationship.
- In 2007-2008, TRIUMF was awarded government funding to establish a not-for-profit commercialization company, AAPS. And due to lack of evidence that Sub B was making any progress with sales, TRIUMF looked for an opportunity to commercialize its expertise, and engaged Startup C to connect with a third party commercial company.
- When Sub B found out about this, they decided to file a lawsuit against Startup C.
- Eventually, TRIUMF had to help smooth things over by making a deal with Sub B, promising that it would not manufacture any small cyclotrons in competition with Sub B, and in return, Sub B dropped the case against Startup C.

Questions for Discussion:

1. Based on the history, what issues do you see arising from the engagement?
2. What could TRIUMF have done/put in place that would have avoided the conflict?