What next?

Some thoughts on making the jump from lab-based R&D work to the marketplace

Dean Connor National Synchrotron Light Source December 8, 2008 "Every worthwhile accomplishment, big or little, has its stages of drudgery and triumph; a beginning, a struggle and a victory."

- Mahatma Gandhi

Start by doing some soul searching

- Is this something that I'm really passionate about?
- Am I curious to find answers to the as-yetunanswered questions ahead?
- Am I sufficiently self-motivated?
 - Do I need someone to constantly tell me what to do?
 - ("They" do not do anything at your startup. If I want something done, I have to do it.)
- Do I have the necessary skill sets to bring the company forward?
- Am I willing to accept and respond to criticism?

Start by doing some soul searching

- Do I need job stability?
 - What if funding runs dry, can my family handle that?
- Can I handle the potential stresses?
 - Am I willing to work long, stressful hours?
 - Will I be able to handle the rollercoaster ride?
 - Do my spouse, family, and friends support me in my endeavor?
- What are my career goals?
 - Will I need to be publishing and/or patenting during the time with the company? Will that be feasible?

"I never perfected an invention that I did not think about in terms of the service it might give others... I find out what the world needs, then I proceed to invent."

- Thomas Edison

Do you have a marketable product?

- Is there demand for the potential product?
 - What are the competing products?
 - What does it do that something else cannot?
 - Is the timing right?
- Can I concisely describe the product so a lay person can understand its potential?
- Will that demand exist for the potential selling price?
 - Who are your potential customers? Talk to some of them. What are they looking for in a product? What are they willing to pay?
- Is the intellectual property protected?
- What agency regulates your product?
 - What roadblocks to selling your product might there be?

"In preparing for battle I have always found that plans are useless, but planning is indispensable."

- Dwight D. Eisenhower

Develop a business plan

- The point at this stage is to force you to start thinking of this as a business that will be manufacturing and selling a product.
- Find some references (local and online) for making a business plan.
 - http://www.sequoiacap.com/ideas/
- Try to identify your areas of weakness.
- Thoroughly revise the business plan often.

Find knowledgeable and trusted people to advise you.

- Find a good attorney with startup experience.
- Find an entrepreneur with experience with a startup within your field.
 - Make sure that this entrepreneur has failed with at least one of her companies.
 - "Few things are harder to put up with than the annoyance of a good example." –Mark Twain
 - Have her review and make suggestions for your business plan.
 - Make sure that you have non-disclosure agreements with anyone who consults with you.

Where to get funding

- SBIR/STTR grants
 - Seed funding in different phases
- State-level technology incubator grants
 - Excellent to get you started
 - NextRay has used this funding to hire a MBA student to develop the business plan.
 - NextRay used this to hire a consultant to do a feasibility study and to improve the business plan.
 - Several states offer matching funds with SBIR/STTR grants.
- Grants from private agencies
- Individual angel investors
- Venture capital firms

Additional thoughts

- Where should the business be located?
 - Is there local talent available?
 - If not, will you be able to get people to relocate?
 - Is there local/state-level funding available?
 - Are there local government grants available?
 - Are there private investors in the area?
 - What are the local costs?

Some internet resources

- Marc Andreessen's (founder of several startups including Netscape) blog with several really helpful and involved essays:
 - http://blog.pmarca.com/
- Ryan Roberts' blog (a startup attorney):
 - http://www.thestartuplawyer.com/
- Dharmesh Shah's blog (experience with several startups):
 - http://onstartups.com/
- Look for blogs from startups in your field.

"Any man who reads too much and uses his own brain too little falls into lazy habits of thinking."

-Albert Einstein