BEST Panel Discussion and Audience Engagement for Careers in Industry, Entrepreneurship, & Management

Featuring panelists (below, l to r) David Putnam, Professor of BME and CBE, Cornell; Stephen P. Smith, General Manager & VP of Business Development, CYC Technology Group; BJ Bormann, CEO & Director, Harbour Antibodies BV and previously Senior VP Boehringer Ingelheim & VP, Pfizer; and Chris Thomas, CTO, Widetronix.

Moderated by BEST Advisory Board members Tiffany St. Bernard and Ken Yancey.

“The BEST panelists provided insightful advice that inspired me to act by setting measurable goals and incorporating their suggestions into my daily routine.”

-Peter Sullivan, Graduate Student in Molecular Biology & Genetics

I once knew a man who could win any chess game using only two pieces. Can you guess which ones? None of us comes pre-equipped to achieve such a feat, which requires a meticulous calculus of anticipation and adaptation. A likeminded economy of resources benefits the industry leader, whose own playing field, while vast on the whole, is winnable yet by effective command. Cornell’s BEST (Broadening Experiences in Scientific Training) Program is committed to ensuring that students better understand the tessellation of professional life before inching a single pawn forward. Piggybacking on the success of their Science Communications Career Panel, held last September, BEST Advisory Board members convened a “Careers in Industry, Entrepreneurship, and Management” follow-up on November 19th in furtherance of the Program’s mission to expand possible avenues for driven graduate students and postdoctoral scholars in the sciences. Whereas the previous panel was made up mostly of Cornell faculty, this time the spotlight fell on those who’d left academia in favor of unexpected careers.

One major exception was David Putnam. Prior to his Cornell tenure as Professor of BME and CBE at Cornell, Dr. Putnam cofounded a start-up pharmaceutical company that was acquired by Johnson & Johnson in 2005. In addition to his academic duties, he has since then...
served as Entrepreneur-in-Residence at PureTech Ventures in Boston. A committed family man with a fuller-than-fulltime schedule, Dr. Putnam laid out his philosophy in succinct terms. Despite having no initial interest in starting a company, he ended up that way by following his curiosity—the foundation of all intellectual enterprise. Sadly, many of us are trained to believe that curiosity is as thin as the diploma it’s printed on. At the dissertation stage, we ask ourselves how our contributions might be useful, only to be told that graduate work will amount to nothing more than a stepping-stone toward greater, more important things. Entrepreneurship is an essential force in upending this trend. “Think of it as a Ph.D. on steroids,” said Dr. Putnam, who firmly believes that the creation of one’s own business is not so much a departure from as an intensification of the very inklings that lead us to higher education in the first place.

BJ Bormann, CEO and Director of Harbour Antibodies BV, was even more instructive in this regard. The outset of her career development was marred by a stigma against moving from the Ivory Tower into the industrial sector. But when fate landed her a job at Pfizer in business development, she grew to love it not in spite but because of her total inexperience, making as it did fresh use of her brainpower in stimulating ways. Amid the host of new skills demanded of her, Dr. Bormann came to swear by her connections. “I live and die by my network,” she confessed. As a graduate student, she remembered being comfortable in her solitude. Too comfortable, in fact. “If you’re bored in the lab,” she added, “you have only yourself to blame.” The solution to this myopia revolves around networking actively outside your field sooner rather than later. In light of this, Dr. Bormann gave perhaps the most salient piece of advice of the panel: Don’t be afraid to be afraid. Fear of failure means you’re ready to go to the top. It means you don’t want to let people down. It means you love what you do.

Chris Thomas is the CTO of Widetronix, an Ithaca-based venture backed company specializing in betavoltaic power sources for hi-tech applications. “Entrepreneurship requires personality,” said Dr. Thomas, further stressing the human variable of the professional equation. As an international business partner who marched to the end of his doctoral line like so many others, he fully understands the value of taking a chance on something nontraditional. “Stay open to everything,” he urged, echoing his panel mates in developing what he called a “360-degree” circle of awareness. Practically speaking, this means being open to learning new things and specializing in more than one area. For while a quality idea will always attract support, with that support comes the need for new applications. In the beginning of any startup, Dr. Thomas noted, ignorance is your best friend and worst enemy in one. You must become comfortable with ignorance. Being aware of where your edges are helps enormously when interacting with those who know what you don’t.

Stephen P. Smith also understands the value of constantly growing oneself. “Better is the enemy of good enough,” said the VP of Business Development at CYC Technology Group, who supports investments in the semiconductor and nanomaterial space in NY. In keeping with the common theme, Dr. Smith never had intentions of becoming an entrepreneur.
Whether or not you are looking to build a company or work for one, he advised, self-advocacy is vital. This involves telling everyone everything you know. Intimidating, yes, but it shows you are honest in assessing your limitations. This “tough love” approach brought home some harsh yet useful realizations for those of us on the cusp, in particular cautioning us against the dangers of networking through social media alone—an empty quest, to be sure. Instead, he recommended intimate, face-to-face meetings. That said, if a company is looking for an exact match, he added, you probably don’t want to work there, because it means there will be no room for growth.

The takeaway points from this productive panel were as eclectic as its distinguished speakers:

• Build your network early and genuinely, until your reputation precedes you.
• Be civil to everyone you encounter along the way.
• Treat the acquisition of new skills not as reinvention but as revelation.
• Recognize that challenge builds character.
• Don’t be afraid to start at the bottom of an industry chain, for it allows you the advantage of holistic insight into a company’s inner workings if and when you decide to build your own.
• Fill a need with your work.
• Idea and implementation are equal partners; the latter often changes the former.

• Remember that companies are looking for passion, so don’t hide it.
• If failure doesn’t worry you, then you’re in the wrong field.
• Never say “I can’t,” or “It’s not my job.”

These recommendations don’t constitute a magic formula, because there’s nothing magic about them. The tactics of success are exactly that: practical and strategic maneuvers that can be only be learned and applied through practice—a dynamic of implementation familiar to anyone in STEM circles. When opportunity comes knocking, don’t just open the door. Tear it off its hinges.

As for the chess king with whom I began, he used only his knights and remained undefeated for as long as I knew him. Neither as versatile as the queen nor as vulnerable as the king, the knights nevertheless became formidable in his hands. They were his best weapons—not because of their inborn function, but because of the total risk injected into their every movement. In light of this metaphor, there’s only one question to ask yourself: What will your pieces be?

The full discussion will soon be posted to CornellCast at www.cornell.edu/video.

Tyran Grillo