Changing talent needs to realize biotech products

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The transition from discovery research to product development has opened new doors for career advancement.

As many biotechnology companies realize the fruits of their drug discovery research efforts—getting new and better treatments into the clinic and beyond—one of the key challenges is having the right resources in the right place at the right time. This means addressing critical issues of talent supply and demand, filling new kinds of positions presented by the momentum of products in the clinic, as well as addressing the importance of matching qualified candidates with new and old position openings. This article discusses current biotech talent trends and the opportunities they present for career development.

Challenges and opportunities

In 2001, 24 biotech products were approved by the US Food and Drug Administration (FDA); in 2002, 35 products were approved. In 2003, in spite of severe economic challenges, there were 25 biotech products approved by the FDA¹.

As companies move products into the clinic toward commercialization, they are developing strong process and product development competencies, strengthening regulatory, quality and manufacturing capabilities, and creating sales and marketing capabilities. What may have once been discovery research-driven organizations are becoming more product-driven. Successes come from products originating in discovery research and coming on to the marketplace, or in-licensed products and/or technologies.

Today, there are more jobs in functional areas outside of conventional areas of discovery research than ever before. Such positions include regulatory affairs and compliance managers and specialists, quality systems specialists, quality assurance and control man-

agers and specialists, manufacturing leadership and staff, medical and technical writers, business development associates and analysts, product managers and sales representatives.

For present and future talent needs, biotech companies tend to focus on people with the knowledge to support and drive emerging research and drug discovery technologies, and, importantly, the knowledge to advance the drug development process toward commercialization. More specifically, this includes knowledge of biological and small molecule process science, analytical methods, quality and manufacturing sciences, regulatory affairs and science-oriented business development and commercialization.

To meet the growing needs of companies producing novel biologics and next generation small molecule drugs, community colleges and biotech companies in the US are beginning to work closely together as never before to develop curricula that ensures a supply of students to help fill the demand for specially skilled quality and manufacturing staff.

The biotech talent continuum

Various functions along the drug development continuum, such as clinical development, quality, regulatory, compliance, manufacturing and sales and marketing, emerge as biotech products are realized. These functions typically originate as virtual functions—heavily using external consultants—until a critical business need is fully established. Other functions such as project management, finance and site operations tend to exist from the earliest days of the company's founding and grow with the company's needs. In terms of career development, the emergence of an increasing number of biotech products and changing talent needs also means that there is more room to transition out of discovery research and into positions in process or product development, quality and manufacturing leadership, and/or business and commercial development.

What are some considerations if you are interested in transitioning out of discovery research and into a new functional area? First, it means that you will need to demonstrate the initiative to establish or strengthen relationships with the consultants or internal staff who are currently leading product and commercial development efforts within your company. Discuss with them any questions and ideas you may have about the work activities and challenges associated with the area of development in which you are interested. Assess the skills you already have. For example, have you worked on a project team that interfaces with another biotech or pharmaceutical partner? If so, what insights, skills and perspectives do you have as a result?

On the other hand, how might your transition from discovery research to product or commercial development benefit the company? First, you may have valuable knowledge of the science behind the product or technology being advanced. You likely know of or have relationships with the people and systems that drive the company forward. Invite someone from the commercial development side to lunch. Express interest in what they do. Ask a lot of questions. Test your real interest in leaving the lab by listening to people talk about what a typical day in business development might be like. Ask what it would take for someone from the research side to successfully make a transition into a product development position. Is there course work that might support such a transition?

There are new and exciting possibilities and potential as biotech products are reaching the marketplace. If you have been in research and are considering a transition to product and commercial development stage opportunities, the timing has never been better. Take the initiative, do your homework, and be willing to be amazed at what may be possible.

1. Biotechnology Industry Organization, <http://www.bio.org/>

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