



**HIRING FOR INNOVATION:**  
The Challenges,  
Risks and Rewards  
in Today's Life  
Sciences Industry

In the business world, innovation is characterized by the new, the improved, the advanced and often the fulfillment of unmet needs – all with the goal of financial reward for the innovators and the ousting of competitors.

For the life sciences industry, innovation is much more than a way to gain an advantage over competitors. It's a core competency that drives the goal of extending and improving patients' lives through the development of solutions to a spectrum of medical challenges.

True innovation in life sciences can lead to groundbreaking developments – new drugs, therapies, medical devices, diagnostics and delivery systems. It can also involve the improvement of existing solutions – the fortunes of some life sciences companies are built on a unique reformulation of existing products.

Innovative employees can be a life sciences organization's most valuable resource. At Adare Pharmaceuticals, a Princeton, New Jersey-based company with a diverse portfolio of drug-delivery technologies as well as prescription and over-the-counter products, most of its products currently in development started out as employee ideas. "When you look at our proprietary pipeline, basically it's all coming from internal innovation," notes Daniel Bélanger, Vice President of Human Resources at Adare.

But the problem is that, for many companies, defining, quantifying, encouraging and hiring for innovation remain an ongoing challenge.

## BEYOND PATENTS

The most common measure of the capacity of a life sciences organization to innovate is the extent of the intellectual property it owns, including both patents and trade secrets. But patent approvals don't necessarily translate to commercial success, particularly in an industry where the process for bringing new products to market regularly faces many hurdles including clinical, financial and regulatory.

"Ultimately, it is commercial success that defines the maturity of innovation," notes Dean Miller, President and CEO of the Philadelphia Alliance for Capital and Technologies (PACT), which connects members with capital, coaching and customers to help accelerate growth and success, and encourages collaboration with other organizations to drive innovation and entrepreneurship in the region. "An organization may have X number of patent filings and patent grants, but what products, what successful companies have been spun out of or built upon that technology?"

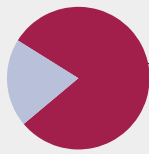
Innovation can also be part of improving processes to be more productive and efficient. "We all need to innovate within our respective functions to improve our company," Mr. Bélanger says.

And, on a broader level, innovation is linked to the organization's core values. For example, one of Adare's core values is to "attack problems from the patient's perspective." Mr. Bélanger says that in his company's innovative culture, this core value can be interpreted as "We fight for patients every day, and this is where we need to innovate."

**WE FIGHT FOR PATIENTS EVERY DAY,  
AND THIS IS WHERE WE NEED TO INNOVATE.**



*Daniel Bélanger, Vice President of Human Resources,  
Adare Pharmaceuticals*



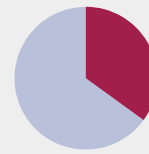
**80%**

OF CEOs ARE FOCUSED ON ORGANIC GROWTH OVER THE NEXT YEAR



**49%**

INDICATED THEY WOULD BE HIRING NEW TALENT



**35%**

INDICATED THEY PLANNED TO INCREASE THEIR FOCUS ON INNOVATION IN ORDER TO TAKE ADVANTAGE OF NEW OPPORTUNITIES

SKILLS MOST IMPORTANT TO THEIR ORGANIZATION:

LEADERSHIP

CREATIVITY AND INNOVATION

## HIRING FOR INNOVATION: BALANCING NEEDS, CHALLENGES AND COSTS

The life sciences industry is in hiring mode. A majority of CEOs are planning for growth – many with innovation as a driver – according to the PricewaterhouseCoopers (PwC) 2017 survey of pharmaceuticals and life sciences CEOs titled “20 years inside the mind of the CEO ...What’s next? Insights from the global pharmaceuticals and life sciences industry.”

Nearly 80 percent of CEOs surveyed said they are focused on organic growth over the next year, with nearly half (49 percent) indicating they would be hiring new talent. More than a third (35 percent) indicated they planned to increase their focus on innovation in order to take advantage of new opportunities. And when asked which skills were most important to their organization in addition to technical business expertise, the CEOs’ top two answers were “leadership” and “creativity and innovation.”

The industry faces numerous significant challenges in recruiting people who possess these desired characteristics, however. More than three-quarters of life science CEOs surveyed admitted it was somewhat or very difficult to find people with leadership, creativity and innovation skills.

“Since the industry is ever-evolving and the number of companies is ever-increasing, it’s been a challenge to keep up in terms of having the right people at the right time and also having their skills developed in such a way that they’re ready to take the job,” explains Debbie Hart, the founding President and CEO of BioNJ, a life sciences trade association committed to facilitating the growth of the biotech industry in New Jersey. The industry is seeing an increased emphasis on “soft skills – the leadership skills and the strategic vision, the collaborative skills, communication skills – the sort of things that aren’t hard science.”

Life sciences companies, particularly the developers of biopharma and orphan drugs, also require highly specialized skills, and they often find themselves searching for individuals with advanced degrees, including Ph.D.s. The pool of qualified candidates is often geographically limited to areas near centers of higher education, making recruitment an extremely competitive process. At the same time, however, employers can’t ignore international candidates who have earned degrees at academic institutions around the world.

The competition for highly skilled and experienced candidates results in rising salaries in the life sciences industries. In the U.S., annual average salaries in the life sciences industry rose 19.2 percent in the past five years, with the most notable increase in wages in research and development (R&D), where the average salary has reached \$135,000, according to Jones Lang LaSalle IP Inc. (JLL) in its report “JLL U.S. Life Sciences 2017: An evolving industry: Today’s clusters creating tomorrow’s breakthroughs.” In fact, wages for R&D employees have surged more than 50 percent in the last decade. This upward trend is expected to continue, even as the industry becomes more cost-constrained.

Rising costs in one area often require cost-cutting in others, and balancing the cost of attracting and retaining top talent with other business expenses is a vital concern, especially for smaller or early-stage companies. JLL points out that the cost of doing business in “life sciences clusters” located near centers of higher education continues to be a significant challenge, particularly when it comes to rising real estate costs in these space-constrained life sciences clusters.



## FINDING THE RIGHT TALENT

To recruit and hire employees who can help foster a culture of innovation, organizations must have a sense of what “innovative” means for them. Definitions of innovation can vary according to each organization, depending on its culture, stage of development, mission and goals.

Deloitte’s “Life Sciences Industry Outlook 2017” report identifies a number of organizational characteristics that drive clinical innovation.

These include the ability to:

- Cultivate academic, industry and regulatory partners
- Engage in continuous learning
- Align actions to a common set of values and objectives
- Adapt to dynamic and uncertain market conditions

Individuals who can navigate obstacles and find alternative solutions are also of the utmost value to life sciences organizations at all stages.

“If you’re going to be working in an early-innovation space, you really need to be flexible, able to re-plot a path based on circumstance, and comfortable being able to put your best plans down, knowing that those plans may all change tomorrow based on something that happens,” says Christopher Laing, Ph.D., Executive Director of Capital City Innovation in Austin. Dr. Laing, who previously served as Vice President, Science and Technology at the University City Science Center in Philadelphia, also believes that “some degree of comfort with uncertainty is a must-have.”

Meanwhile, even the most innovative employees never lose sight of the organization’s business objectives. “As a scientist, I love invention and I love discovery. I’m fascinated by stories of great new scientific discoveries. But in my day job, what I’m really trying to do is determine which of those discoveries may have commercial value and could be transformed into products that can ultimately be used in a health care setting,” explains Dr. Laing.

In some organizations, and especially in the smaller or early-stage ones, going the extra mile to reach those objectives is essential. “When you’re working in a startup company, you also need to be able to roll up your sleeves and be a bit of a jack-of-all-trades,” says Dr. Laing. “Often with these projects, the team is so small that people are doing everything from market research to engineering work in the lab to going out and speaking to vendors. You really need to be prepared to jump in where you’re needed.”

In more established settings, teamwork expands into a culture of collaboration. At The Wistar Institute in Philadelphia, a leading biomedical research organization with expertise in cancer research and vaccine development, collaboration between the research and business development sides of the organization is key to innovation.

“We promote a lot of flexible collaborative arrangements, based on what our researchers like to do, that expose the organization to new ways of doing things and new ideas,” explains Heather Steinman, Ph.D., Vice President, Business Development and Executive Director, Technology Transfer at The Wistar Institute. “When you have a culture of collaboration between business development and scientists, it becomes a two-way street – we can share information in real time and explore ideas, and also share them with our external partners.”

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*Christopher Laing, Ph.D., Executive Director of Capital City Innovation in Austin*

But working in such a highly collaborative culture isn't for everyone, admits Dr. Steinman. "It's a different type of environment, so I think people self-select when they want to come here."

## LOOKING FOR AN EDGE

With the life sciences industry facing an increasing number of obstacles – from escalating R&D costs and increased regulatory constraints to a perceived decrease in the public's trust in the pharmaceutical industry and in business in general – hiring for innovation can provide the edge it needs.



WHILE TECHNOLOGY CAN FACILITATE INNOVATION, LIFE SCIENCES CEOs SEE RECRUITING PEOPLE WITH THE RIGHT SKILLS AS AN IMPORTANT DRIVER OF INNOVATION.

And while technology is seen as an important facilitator of innovation, PwC's CEO survey indicates that life science executives are clearly as or more concerned about being able to recruit people with the right skills to drive innovation. More than two-thirds of CEOs reported difficulty finding employees skilled in leadership, problem-solving and creativity. As a result, companies are moving beyond finding talent through personal connections and networking by ramping up their HR initiatives or by utilizing outside resources to help find very specialized or high-level talent.

Finding candidates with such skills is clearly worth the effort. Employees who are "solution-oriented" become an integral part of an innovative organization, notes Sonny Stafford, Vice President of Marketing at JDS Therapeutics in Purchase, New York, which develops and commercializes natural bioactive substances to improve human health.

"One thing I focus on with my team members is that when confronted with a problem, they should think through the problem and come up with a few potential solutions," Mr. Stafford explains. An innovative employee doesn't accept defeat; he or she is proactive about finding new ways around an obstacle, he says.

To balance the rising costs of salaries and R&D, organizations are also looking at other, less expensive ways to encourage innovation. Some life sciences companies are revamping traditional lab configurations to promote more teamwork and collaboration. For example, JLL notes that Biogen designed a new open office plan to foster collaboration among employees and added amenities such as a fitness center and on-site day care to improve employees' quality of life.

## ACCEPTING THE CHALLENGE

Ms. Hart of BioNJ says her trade organization is on a mission to explain the value of innovation in the industry. The impact of innovation includes new hope for children with cancer, and for people with AIDS and hepatitis C, among many other diseases: "We're trying to help explain or increase awareness around the value of medical innovation and the kinds of differences that it's making in terms of patient life years."

Creating a culture of innovation is an undertaking today's life sciences companies must conduct on multiple fronts – including the challenging task of finding and hiring employees with the right combination of critical leadership, problem-solving and creative skills.

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