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MX Business Strategies for Medical Technology Executives

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BUSINESS PLANNING & TECHNOLOGY DEVELOPMENT

The Academic Connection

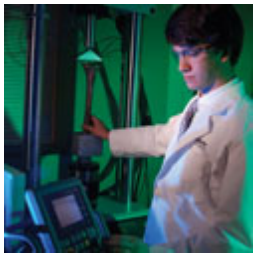
Nationwide, strong institutional support is creating a vital breeding ground for medical device companies.

Charles F. D'Agostino

At the same time local governments are seeking ways to spur economic development in the life sciences industries or revitalize neighborhoods, many medical device manufacturers are seeking ways to decrease costs and form partnerships. University scientific research parks represent the perfect marriage for many device manufacturers and local government officials, as they facilitate connections and close collaboration among talented people. The resulting combinations have the power to create energetic atmospheres of innovation for the companies and economic renaissances for the communities.

Many start-up life science companies cannot justify or afford to purchase expensive resources and equipment for research and development purposes with the limited financial resources they possess. By locating in a research park, companies can often gain access to university laboratories and equipment through agreements that allow companies to purchase time on expensive equipment owned by the host institution.

Companies can also gain access to the specialized knowledge possessed by university researchers, as the lead researchers are often faculty members themselves. The close proximity of research parks to universities enables the faculty member to maintain good working relationships with both the university and the company and its executives. This article takes a look at the varied benefits that university research parks can offer medical device manufacturers and provides examples of successful ongoing collaborations.



(click to enlarge)
Researchers at the nonprofit InMotion Musculoskeletal Institute in Memphis work with industry to improve the treatment of musculoskeletal disease.

Sidebars:
Kent State Centennial Research Park and Pathogen Systems Inc.

Oregon Health and Science University

Tri-Cities Research District

Building from the IP Up

Intellectual property is one of the most valuable assets of a medical device manufacturer, and such assets can originate from a variety of sources. While some companies that partner with university research parks bring their core intellectual property with them, others look to the universities themselves as valuable sources of ideas.

For example, Piedmont Triad Research Park, affiliated with Wake Forest University, works with university researchers to license or form start-up companies with university intellectual property. Wake Forest University Health Sciences is foremost in the expansion of a new park, which was designed by Sasaki Associates (San Francisco). The Biomedical Research Campus District alone will encompass 72 acres out of the 200-acre park.

When developing a relationship with a university research park, manufacturers will find that many points are up for negotiation, including issues surrounding the ownership of intellectual property that is brought into or emerges from the collaboration. Some research parks may want to have an equity stake in a company or its IP as part of the tenancy deal. Others may not. During negotiations, clear communication and detailed assessment of the value that both parties bring to the collaboration are key to settling on a fair and mutually beneficial arrangement.

Varied Research Offerings

The resources available at university research parks across the country vary greatly, as do the types of endeavors supported by the parks. Certain universities and their parks are de-signed to support specialized interests, such as specific device sectors, nanotech, biotech, clinical chemistry, clinical trials, or others. When considering a partnership with a particular park, manufacturers must consider the establishment's history in terms of the types of companies that the park has traditionally supported.

Likewise, the types of university departments that support or have relationships with the park such as biomedical engineering, surgery, or molecular biology departments speak volumes

with regard to the type of intellectual capital that will be available to a budding company. The same can be said for the park's partnerships or other connections with large medtech companies.

In addition to intellectual re-sources, physical features of re-search parks run the gamut, and many parks are in the process of ex-panding or updating their facilities. For example, Technology Enterprise Park (Atlanta) is in the process of building an 11-acre park that will include a biotechnology complex just outside Georgia Tech University. The planned four buildings will feature open space inside each building, and customization of that open space for small manufacturers. The Emerging Technology Center, a 60,000-sq-ft wet lab and bioscience incubator located on the campus of Louisiana State University is another example of a facility that offers shared resources to medical device companies such as MaxiFlex LLC, which manufactures urological surgical devices.

Likewise, University Park at the Massachusetts Institute of Technology, developed by Forest City Science and Technology Group (Cambridge, MA), goes beyond simple access to a premier research institution. It is a 27-acre mixed-used development that combines 1.3 million sq ft of bio-tech research space with residential housing, a hotel, and commercial properties. It was the winner of the Urban Land Institute's 2004 Award for Excellence.

Another Forest City property, the Science and Technology Park at Johns Hopkins University, will offer similar amenities, along with 1.1 million sq ft of lab and office space. The facilities and access to Johns Hopkins University School of Medicine will offer medical device companies an excellent avenue for partnership formation.

Building Businesses

Many research parks offer direct business assistance to park companies. For example, the Virginia Bio-technology Research Park includes the Virginia Biosciences Development Center. The center provides assistance by evaluating potential university technologies, with the intent to spawn companies derived from university research. Once a company is established, the development center assists with business strategies and provides mentors to companies located in the park's incubator. The BioBiz program also places graduate-level business students inside biotechnology companies to assist with solving various business-related issues.

The Louisiana Business and Technology Center at Louisiana State University's South Campus Research Park offers management assistance, financial modeling, and small business innovation research grants to incubator and research park clients in the medical device and life sciences fields. The center employs full-time business counselors, including eight MBA graduate assistants and a counselor who holds both MBA and MD degrees, to assist technology companies.

Conclusion

Today, university research parks have evolved well beyond simply providing four walls and a floor to their harbored companies. Medtech companies can now find research parks with offerings that support nearly every stage of their development.

To find out more about research and science parks, and the benefits they can offer to medical device companies, contact the Association of University Research Parks, a 350-member organization that actively encourages and promotes university-industry interaction. The organization can be found on the Web at www.aurp.net.

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