Establishing a Corporate Innovation Center at the University of Illinois Research Park

Why and How Companies Locate Within the Research Park
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ABOUT THE RESEARCH PARK AT THE UNIVERSITY OF ILLINOIS

The Research Park provides an environment where technology-based businesses can work with faculty and students to take advantage of opportunities for collaborative research and commercial endeavors. Examples of large corporations in the Research Park include: ADM, Abbott Laboratories, Caterpillar, Deere & Company, Dow, Littelfuse, Neustar, Riverbed, Sony, State Farm, and Yahoo. These businesses have research relationships with the University that have resulted in sponsored research, curriculum and teaching contributions, faculty consulting, and partnerships on federal grants. The other primary expectation for an Innovation Center is discovering talent for immediate and future workforce needs.

At any given time, approximately 350 UIUC student interns are working in these companies each year gaining valuable work experience while making real contributions to internal corporate R&D and product development programs. This year-round student workforce model has emerged as a unique business model offered by the University of Illinois.

The Research Park at the University of Illinois was created by the University of Illinois to advance its economic development mission. The University allocated 200 acres adjacent to central campus for development of the technology park. A private developer was selected as a partner to help advance the development. Within 10 years the Research Park transformed agricultural green field land from fish ponds and swine facilities into a vibrant technology park with 13 buildings, housing 90 companies and 1,400 employees. EnterpriseWorks, the incubator managed by the University of Illinois, provides strong entrepreneurial support including an entrepreneur-in-residence program to help advance new companies.

Since opening in 2001, the Research Park has also incubated 145 startup companies, helping to turn University of Illinois research into commercial businesses. The Research Park supports these companies and larger clients through weekly events to educate entrepreneurs, create a social environment among the technology companies, and build a community.

**Recent recognition and awards:**
- The University of Illinois Research Park was named **2011 Outstanding Research Park of the Year** by the Association of University Research Parks, an organization representing 400 research parks internationally.
- EnterpriseWorks was named by Inc. as one of **“10 Start-up Incubators to Watch”** in July 2011.
- On April 16, 2010 Forbes.com ran a story, **“In Depth: 10 Technology Incubators That are Changing the World.”** The University of Illinois Research Park was included in the list based on its support of startup technology firms, peer community of large corporate operations, student employment in companies and its storied history of innovation.

WHY ARE MAJOR CORPORATIONS LOCATING AT THE UNIVERSITY OF ILLINOIS RESEARCH PARK?

Companies locate in the Research Park because there are multiple opportunities associated with being close to the University and in East Central Illinois. Recruiting top talent is made easier through direct contact with students through internship programs and on-campus recruiting. Companies can establish research agreements with world-class University departments and interact with faculty members. Corporate Innovation Centers like the ones already at the Research Park are proven resources for corporate innovation strategies. Finally, the local Champaign-Urbana tech workforce is high-quality, stable and a great value compared to East and West Coast costs.

**Unique student employment model enables access to innovation and talent**

Corporations in the Research Park employ students in their innovation centers to help them creatively address technical challenges, augment staff through summer and year-round internships, and create a talent/recruitment pipeline. This model is unique to Illinois as we have not seen this done at other parks in the same way. This model began with
Caterpillar and has been replicated repeatedly with success. It works at Illinois because the Research Park is located on campus and is close enough for students to find and work part time during the school year. Other Research Parks are often in remote locations.

Many programs and services are available to support this model. Some include: annual Research Park career fair, marketing Research Park internships to students at the UI Quad Day and other settings across campus all year, annual student intern awards in the Research Park, internship programs that allows companies to outsource payroll and visa documentation to the University, and numerous other support efforts that have not been developed at other universities for the purpose of specifically helping on-campus companies.

Over 350 students work in the Research Park for 50 companies on an annual basis, representing almost one-third of the total Research Park workforce. Companies supplement research staff with highly-skilled graduate and undergraduate students from top University of Illinois programs. Student employees and research assistants can work on projects year round (not just as summer interns), and intellectual property remains with the company. Students work on a variety of projects, including product development, production work and exploring new ideas and technologies for the corporation. Student wages are substantially lower than full time hires (40-50% less), and transitioning student interns to full-time hires after graduation may be easier compared to external recruits due to pre-training and previous exposure to business culture and structure.

**The University of Illinois is an excellent partner for innovation and problem-solving**

The University of Illinois at Urbana-Champaign (UIUC) is a world leader in research, teaching, economic development, and public engagement. It is distinguished by the breadth of its programs, broad academic excellence, and internationally renowned faculty. The combination of our research capabilities with the breadth and distinction of our academic programs makes the University of Illinois a natural one-stop shop for today’s corporations seeking assistance with solving cross-functional and company-wide problems.

The University of Illinois ranks in the top thirty in the nation in research expenditures by universities. Research and class projects extend well beyond campus, taking students and professors outside their classrooms and laboratories to share expertise and technical support with not only manufacturing firms, farmers, and businesses in the state of Illinois, but also with organizations around the world. Individuals, particularly those of Illinois, also enjoy the resources of the university, benefiting from numerous conferences, institutes, credit and non-credit courses, and workshops conducted each year.

**Fast Facts about University of Illinois:**

- $563,710,000 spent in FY2009 on research and development in science and engineering at the Urbana campus
- 400+ companies funded research collaborations in 2011 at the University in its entirety, including both the Champaign and Chicago campuses
- 150 affiliated centers and institutes performing research for government agencies, industry, and campus units.
- 42,605 students at the University of Illinois: 31,932 undergraduate and 10,673 graduate and professional students.
- 2,975 Faculty Members; 1,871 tenure/tenure track, and 1,104 other faculty
- 22 Nobel Prize faculty and alumni winners
- FY2009 total budget was $1.583 Billion for the University of Illinois Urbana campus
- 5,000 courses in more than 150 fields of study
- 100+ graduate and professional programs

Illinois faculty and research scientists are among the world’s most prolific and accomplished—a group that includes Nobel and Pulitzer Prize winners, members of the American Association for the Advancement of Sciences, American Academy of Arts and Sciences, the National Academy of Sciences, and the National Academy of Engineering; and recipients of MacArthur Fellowships to name a few. These faculty work in
interdisciplinary research centers and labs across campus like the National Center for Supercomputing Applications, Institute for Genomic Biology, Beckman Institute for Advanced Science and Technology, and the Energy Biosciences Institute—each part of a complex research infrastructure designed to support innovation, discovery, and development. In 2011, more than 400 companies funded research collaborations at the University in its entirety, which includes both the Champaign and Chicago campuses. Furthermore, the University of Illinois at Urbana-Champaign was the number one recipient of National Science Foundation (NSF) funding in 2011.

The University of Illinois has many top ranked department and scientific areas that align with strategic areas of interest for national and international businesses. These areas include Data Sciences, Informatics, Statistics, Management Information Systems, and Supply Chain Management. Illinois has a top 5 ranked Engineering and Computer Science, which puts it in an elite class of peers including: MIT, Stanford, UC Berkley, Cal Tech, GA Tech and CMU. However, UI is the only one located in the Midwest and is within driving distance to major urban areas including Chicago, IL; St. Louis, MO; and Indianapolis, IN. In addition, UI has 46% more engineering students than MIT, Stanford, CMU, and Cal Tech combined. Our sheer volume of engineering students puts us in a league of our own, and yet we offer the same quality as the other elite engineering schools. Our Graduate School of Library and Information Science's program is ranked #1 in the nation.

**Innovation Centers are a key resource for a corporate Open Innovation Research Strategy**

Some companies utilize their Research Park operations as an innovation hub to find new technologies or concepts for the company’s future. This involves meetings and outreach with faculty members and departments throughout the university. This also includes finding relationships that are not obvious such as discovering new departments for the company to engage with and seeking interdisciplinary opportunities on campus. In addition to providing closer access to sponsored research opportunities, companies report that work done at Research Park facilities also results in new publications and patent filings.

For example, John Deere opened an innovation center in the Research Park to “accelerate [their] innovation strategy and leverage the capabilities of the external environment.” They reported that the relationship with the University of Illinois through the Research Park, “has made significant contributions at John Deere in terms of new relationships that expand [their] technology vision, innovations that solve complex problems in [their] business, and filling [their] global talent pipeline with students that build new capabilities for [their] business.” Some of this work is patented or published. Deere also uses this facility and relationship to filter for sponsored research opportunities at the University that will further enable their research and product development efforts. In this approach, students work on potential opportunities before Deere engages in sponsored research.

In another example, Abbott is funding new strengths on campus through interactions with the Beckman Institute for Advanced Science and Technology (an interdisciplinary research institute devoted to leading-edge research in the physical sciences, computation, engineering, biology, behavior, cognition, and neuroscience) and the Institute for Genomic Biology (IGB), an institution dedicated to transformative research in agriculture, human health, the environment, and energy use and production. This has resulted in the establishment of the first-ever multi-disciplinary nutrition and cognition research center on the UIUC campus. The Center for Nutrition, Learning, and Memory will utilize both the Beckman Institute and the IGB to lead directed and solicited research on the impact of nutrition on learning
and memory in the human brain. Abbott views its relationship with the University as a key part of their strategy. Robert H. Miller, Ph.D., divisional vice president, Nutrition Research & Development and Scientific Affairs, Abbott Nutrition, explained, "a fundamental necessity of our business is to ensure continuous innovation and we look forward to forging a relationship with UIUC and the Division of Nutritional Sciences, as well as other University Schools and Colleges."

In addition to conducting exploratory and research projects at their Bioenergy Modeling Center in Research Park, Archer Daniels Midland (ADM) founded the Institute for the Prevention of Postharvest Loss with a $10 million grant to UIUC. ADM also uses its center in Research Park as a part-time homebase for ADM employees that work in groups including feed, IT, and fermentation, who often visit campus and interact with various units and operations within the University. Student interns at ADM are also doing important work for the company. In 2009, an intern reviewed literature and modeled in-house data to help determine at an early stage of development the most relevant design features for a large scale reactor. His findings, which resulted in a paper, were considered instrumental for current in-house developments at ADM for second generation biofuels production.

Neustar also views its Research Park operations and University relationship as a key part of its innovation strategy and the company’s future: “The partnership with the University of Illinois allows us to further examine the untapped potential of tomorrow’s technologies,” said Mark Bregman, CTO, Neustar. “By combining Neustar’s powerful information and analytics with students’ technological prowess, we believe the Neustar Innovation Center will put forth new and exciting solutions that will impact the market.” Neustar’s tech areas of focus are IT security and Big Data, and they work with the Computer Science department, the Graduate School Library and Information Science, the Statistics department and the NCSA at the University of Illinois.

Finally, Littelfuse strategically chose to locate its High Power Testing Lab in the Research Park due to the opportunities for collaboration with University of Illinois’ College of Engineering faculty and staff. As Littelfuse seeks new connections to the University’s electrical engineering department, they have made their lab available to support power engineering curriculum. They also see this relationship as very important for the future since students can witness the capabilities (and dangers) of electrical power, and Littelfuse can help facilitate the intersection of theory and practice.

Champaign has high-quality tech talent in an affordable community on U.S. Central Standard Time

Champaign-Urbana is a top destination for corporations seeking to establish an innovation center due to the availability of a talented workforce, the lower cost of doing business, the world-class engineering program at the University of Illinois, and the vibrant tech community. Champaign County is the most highly educated county in the state of Illinois, and Champaign-Urbana has become a cluster of high technology firms. Champaign is within driving distance of major urban areas such as Chicago, St. Louis and Indianapolis. Its Midwestern location is also functional for getting work done during standard U.S. operational hours.

| Many international tech corporations have established IT development centers in the community |
|--------------------------------------------|--------------------------------------------|---------------------------------|
| • Yahoo\(^1\)                              | • Neustar\(^2\)                             | • Pearson Digital\(^3\)           |
| • Intel\(^1\)                               | • Infobright                               | • Amdocs\(^2\)                   |
| • Volition, THQ\(^1\)                       | • Wolfram                                  | • Spectris (HBM) \(^3\)          |
| • Citrix\(^1\)                              | • Finisar\(^1\)                            | • 004 Technologies               |
| • Riverbed\(^1\)                            |                                          |                                 |

\(^1\)NASDAQ \(^2\)New York Stock Exchange \(^3\)London Stock Exchange
Companies cite Champaign as a strong market for attracting an IT workforce due to the concentration of IT and programming talent, the lower cost of living, the strong retention of employees once hired, and the access to a flexible student workforce and recruiting pipeline. Yahoo!, for example, chose the Research Park not only because of the existing engineering workforce in the park, but also the engineering capability within the community because of the University of Illinois. Yahoo!’s operations are focused on cloud computing, including a Hadoop Center of Excellence. Riverbed Technology, a California-based company, has also located in Champaign because of the cost savings associated with hiring talent in the Midwest. In their first five years, Riverbed added 28 employees to their local operations and reports employee costs as approximately 50% the cost of Bay area engineers.

**NOT TO MENTION THE AMENITIES....**

There are a number of programs and services available within the Research Park and at the University that client companies can access, some at discounted rates:

- **50% off NCSA’s Private Sector Program.** Companies work with NCSA staff and leverage NCSA’s tools and technologies to address the company’s high-performance computing and IT challenges.
- **Discounted rates for use of co-location server room in the EnterpriseWorks incubator**
- **Discounted rates at the iHotel in the Research Park**
- **Discounts for Chesterbrook Academy daycare in the Research Park**
- **Free job postings on University career services systems and in the Research Park**

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### Geographic Wage Comparison

<table>
<thead>
<tr>
<th>Position</th>
<th>Champaign County</th>
<th>Other Area Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low salary</td>
<td>Avg salary</td>
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<tr>
<td>Administrative assistant</td>
<td>$24,000</td>
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<tr>
<td>Analytical chemist</td>
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<td>Application developer</td>
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<tr>
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<tr>
<td>CEO/President*</td>
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<td>$90,750</td>
</tr>
<tr>
<td>CFO*</td>
<td>$40,000</td>
<td>$100,500</td>
</tr>
<tr>
<td>Computational modelling engineer</td>
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<tr>
<td>COO/VP of Operations*</td>
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<tr>
<td>Data warehouse/database administrator</td>
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<td>Engineering director/CTO*</td>
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<td>$99,571</td>
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<tr>
<td>Electrical engineer</td>
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<tr>
<td>Embedded systems engineer</td>
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<td>Internet/internet programmer</td>
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<td>Laboratory manager</td>
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<td>$126,000</td>
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<tr>
<td>Laboratory technician</td>
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<td>Manufacturing manager</td>
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<td>$50,000</td>
</tr>
<tr>
<td>UNIX administrator</td>
<td>$40,000</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

*Direct Survey—small business tech operations only*  

_Source: Bureau of Labor Statistics_
- Access to shared conference rooms in the park
- Access to University lab and testing equipment and staff through Facility Use Agreements and Technical Testing Agreements
- Access to campus recreation and other benefits via Allied Agency status
- Wi-fi access on campus
- Champaign Urbana MTD bus service runs through or next to the park, including the Yellow, Airport, Brown and Gold lines. Busses run regularly, and the Illini Union is accessible via a 15-minute ride.
- Electric vehicle charging station in the EnterpriseWorks parking lot
- Sports leagues and events organized by Research Park companies
- Library computer terminal in the Research Park with online journal access
- Free parking for employees and guests, including during Football and Basketball games
- Motorist Assistance Services through University of Illinois: locked key service, flat tire, jump-starting
- Purchasing programs and discounts including lab supplies, office furniture, fitness center, and shredding service

**WHAT KINDS OF OPERATIONS DO COMPANIES HAVE IN THE RESEARCH PARK?**

Current corporate operations in the Research Park include research, development and corporate projects with an element of talent development. Some companies are very focused in terms of their disciplinary area of work, while others take a broader approach. For example, Caterpillar focuses on Mechanical Engineering projects, while State Farm projects range from robotics and artificial intelligence to mobile driving tools to actuarial sciences and economics. When setting up their operations, most companies start within a key technology area and then replicate the model to address additional technologies of interest from within the organization.

*Examples from current operations in the Research Park*

The following are examples from major organizations within the park.

- **Neustar's** operations are part of Neustar Labs, which reports to the Neustar CTO. Students are hired to do research and work on future-looking projects that are identified through internal solicitations. Students use Neustar data and systems to develop prototypes of tools, conduct research and do visualization work within the areas of IT security and big data analysis.
- The **State Farm Research and Development Center** employs University of Illinois students to work on research projects in areas including: actuarial science, financial analysis, applied statistics, market research, competitor intelligence, new technology innovation, and mobile application development. Since opening in 2005, more than 500 students have had internships at the SFRDC in the Research Park.
- **Yahoo in the Research Park** employs approximately 90 full time engineers to work on cloud computing related to content and advertising delivery for the Yahoo platform. The location is a Hadoop Center of Excellence and has boasted its success through retention and quality of hard to find engineers. The center also plays a role in Yahoo innovation, with more than 30 patents submitted from the office in 3 years.
- **The Abbott Center** employs graduate students to work on a wide range of research projects, focusing largely on pediatric nutrition product development. Projects include: developing educational materials about nutritional ingredients like prebiotics, regulatory filing preparation including manuscripts and GRAS dossiers for new ingredients, supporting Global Pharmaceutical Operations for trend monitoring of product release testing and stability data.
- **Caterpillar’s Champaign Simulation Center** leverages CAT expertise with University of Illinois students to provide cost effective off-site analysis, simulation and design services. Projects include: Machine Performance Analysis, Casting Simulation, Stress Analysis and Life Prediction, Manufacturing Process Simulation, System Structural Analysis, Computational Fluid Dynamics, Hydraulic System Modeling, Symbolic/Numeric Analysis, 6 Sigma Tolerance
Caterpillar hires students to work on teams led by experienced full time engineers.

- **ADM’s Bioenergy Modeling Center** employs chemical engineering and agricultural sciences students to perform computational work, conceptual engineering, and modeling. One modeling project involves the use of glycerin, a by-product of bio-diesel, to be made into glycol, which is a specialty chemical with solvent, moisturizing, and cooling properties. The ADM center in Research Park is also used on a part-time basis for some ADM employees that work in the feed, IT, and fermentation groups.

- **John Deere & Co.’s Research Center** houses a variety of projects that involve sensors for agricultural equipment and new applications for sensors in construction equipment. The student employees’ work is research-oriented, particularly around sensor technologies. One student might work on engine modeling, another on control-systems development and others on sensor projects. Students typically work with engineers in design groups at Deere factories.

The project-based Innovation Center concept

These operations enable project-based research and development to address corporate problems or explore new technologies linked to the company’s innovation strategy. This process involves may involve full-time staff, University students, and University faculty (see concept diagram below). The Innovation Center project pipeline is fed from corporate requests and submissions. Selected projects are assigned to student teams for initial research and analysis. Promising projects are then sent back to corporate for further development and implementation or they are advanced on site through engagement and collaboration with University faculty and/or research institutions. Project implementation at corporate locations can be aided by interns who converted to full-time employees as they are already familiar with the company’s technology and culture. In addition to this project work, company representatives also work on finding and developing talent on campus and building relationships with University departments and faculty.

An operational structure to support success

This project work is enabled by an operational structure that allows for on-site oversight of staff, students and university relationships, and also enables corporate stakeholder involvement in research and development projects. The following diagram illustrates this structure and these relationships.
**How do companies develop and implement a student employment model?**

Internship programs vary by company, but the majority of organizations has interns year-round and hires students from academic disciplines that align with current project needs. Internship function planning should address the administrative and operational components of student employment.

*Determine how students will be employed to work for the firm (e.g., direct or indirect hires)*

There are generally three options for hiring students in the Research Park, and these have varying costs and administrative requirements associated with them. Additional consideration should be given when hiring international students.

- **Direct hire at an hourly rate**: the hiring company is responsible for all human resources services and the student is on the company’s payroll. Information about average student hourly wages in the Research Park by discipline and academic level is available in the appendix.

- **Indirect hire at an hourly rate through Research Park Internship Program**: Under this program, the intern is a student that is regarded as an employee of the University and performs work or services for the company as an independent contractor without any employment relationship between the company and the student. The University of Illinois is responsible for all human resources services and the student is on the University’s payroll. The company pays an hourly wage to the student plus an overhead charge of 35.9% on all student wages to the University for administrative services. The company retains ownership of the work product.

- **Indirect hire through a graduate assistantship**: the Research Park Internship Program also helps facilitate graduate assistantships for graduate student interns. Graduate assistants work a specified number of hours per week (ranging from 25-67% appointments) in return for a monthly stipend, tuition waiver and fringe benefits. For instance, a 50% appointment (20 hours per week) costs approximately $60,000 per year. The company pays these costs and the student is on the University’s payroll. The company retains ownership of the work product.

International students can be hired to work in the Research Park under the following scenarios:

- Hire a student through the Research Park Internship Program as an hourly employee or graduate assistant
• Sponsor an F-1 student for Curricular Practical Training (CPT) during their studies or Optional Practical Training (OPT) upon graduation
• Sponsor a J-1 Exchange Visitor for Academic Training

_Determine how students will interact with the organization and the type of work they will do_

Students can be given independent projects to work on or serve as staff augmentation. Companies regularly report that students contribute significantly to teams and project work, and have the technical capacity to function at the same level as full-time employees.

Students are ideally exposed to some additional challenges or projects that may allow them exposure within the company and showcase their skills during the summer or class break periods. As one example, Caterpillar hires student interns to work at its Simulation Center on simulation and analysis projects for internal clients across the company. Students work on project teams monitored by a full-time staff member. This workforce also serves as a talent pipeline since over 50 percent of interns have accepted full-time positions with Caterpillar upon graduation.

In another example, the State Farm Research & Development Center (SFRDC) utilizes student interns for a wide range of exploratory projects in the Research Park. The following case study outlines the key components of the program:

• The State Farm corporate innovation team identifies project ideas from across the corporation that could help transform the company or create future innovation. They have an internal system to capture these ideas throughout the year from across their organization.
• The central corporate innovation team then vets the hundreds of ideas that are received to prioritize potential and filter out ideas that they do not believe fit with the company.
• Good ideas are sent to the SFRDC for additional research and validation. Student teams explore them further in a cost-efficient manner. Results are then presented back to State Farm corporate groups to determine if any of the ideas should be implemented.
• SFRDC reviews the potential projects to determine if they are feasible for students to address and sets a timeframe for completion (typically one semester). They determine the skills needs by students to complete each type of project, such as computer science, mechanical engineering, mathematics, or other disciplines.
• State Farm Human Resources then recruits from UIUC for students for projects across UI Departments. They screen students and help them to establish internships at the SFRDC as part time State Farm employees.
• Students work with little oversight and management on the innovation projects. They might have as many as 28 students with just 2 full time people managing their work flow because the students are encouraged to come up with their own solutions and ideas. They have regular check points through the semester and milestones set for them by State Farm to determine their progress. All students work at the SFRDC on their projects Monday through Friday and keep time using an electronic timekeeping system. Students typically work in pods together and have access to State Farm data/IT systems, but no phones or file cabinets.
• At the end of their projects, some of the best students are recruited for full time positions within State Farm. This is more common for “staff augmentation” projects.
• State Farm also hires students to work on more imminent projects and work needs such as actuarial science and statistics projects. These students have a higher retention rate in the organization because there are more likely to be open positions that need their skills.
• Sample projects include a Drowsy Driver Alert mobile application, predictive pricing modeling for auto and homeowner’s insurance, Driver Feedback Accident Detection and Response mobile application, and exploration of social media and smartphone marketing opportunities.

Check out online videos about
Research Park internships
• Research Park internships overview
• State Farm Research Center internship program
Intern manager testimonials demonstrate the capacity of student employees:

- “[Her] modeling and structural analysis work is very comparable to the work done by full time engineers and has allowed her team here in the Research Park to serve more customers that it could otherwise serve.”
  - Caterpillar manager

- “[He] was instrumental in collecting data and meeting the tight deadlines which earned Serionix a merit-based Phase II invitation from the Army and laid the groundwork for another strong proposal to the NSF.”
  - Serionix manager

- “Because of his advanced technical aptitude, understanding of business applications, and ability to contribute in a team environment, I feel that [he] has set an example of what should be desired from an intern.”
  - Caterpillar manager

- “We will be applying for patents and/or submitting for publication the results of [his] work.”
  - John Deere manager

- “[His] work is widely talked about and he...had the opportunity to present to the division vice-president (an audience, it should be noted, I have not presented to myself).”
  - State Farm manager

**Develop a year-round student engagement and recruiting plan to identify prospective employees**

University students can be recruited from a variety of disciplines, at all educational levels and at a wide range of pay scales. Companies also find that hiring students through the University as part of the Science and Technology (Research Park) Intern Program is a significant benefit since this enables them to hire international students on visas.

Students can be hired and recruited year round, but hiring by semester allows students to plan the work schedule around their class schedule and plan activities accordingly. Keep in mind that fall semester is a busy recruiting season for students looking for full time placement and internships, with the highest volume of employer recruitment occurring between September-November.

Companies should determine who will be responsible for recruiting students. The Site Manager may be solely responsible, or corporate HR may also be involved. Additionally, other groups from within the company may need to be involved with Research Park or hiring for other company locations and functions. For example, one company reported that generally five employees outside of Illinois come to career fairs at the University to recruit for other groups within the company.

Recruiting opportunities are available year-round and through a variety of approaches. Depending on the schedule for setting up the Innovation Center, all or a few of these options can be used for initial recruiting efforts. These recruiting opportunities can also be utilized for non-Research Park hiring needs.

- **Write job descriptions and post them on campus job boards.** Employers may post positions at no cost directly online on job boards hosted by career services offices throughout the campus. These career services offices can help companies review position descriptions if assistance is needed. The Research Park also has a job board available for postings.

- **Identify specific candidates and reach out to them with targeted messages by using an online resume database.** In Engineering, this is available through the Symplicity online job system at http://engineering.illinois.edu/careers. There is an annual fee of $250 per company for resume access for the academic year, though the fee is typically discounted after the spring semester begins. You can search the resume database by degree, major, graduation date, and resume keywords.
- **Recruit at Career Fairs.** Employers can choose from a number of career fairs to access our more than 8,000 undergraduate and graduate students. These include department-specific fairs or campus-wide events.

- **Give an on-campus company presentation.** Many corporations host a company presentation at the Illini Union during recruiting season as an introduction of their company to students. It is common to host this after a fall career fair and invite students with resumes of interest in addition to promoting the event on campus through ECS and other advertising.

- **Guest lecture on campus.** A number of professors invite corporate speakers to present in their classrooms and in seminar courses.

- **Test drive students on UI semester projects.** Corporations can engage student teams through semester programs that are designed to address corporate project needs such as Illinois Business Consulting and senior design courses. These programs can complement Research Park operations and also provide a good way to identify top students and explore feasibility of student capabilities that could be extended with additional work in the Research Park.

Recruiting costs vary by company. Companies should keep in mind that there are fees for career fair registration, and other costs can include advertising and brochures, advertising within departments (e.g., to professors who interact with students), and travel for non-local employees. One company reported that they spent close to $3,000 on fees for career fair participation in a spring semester.

**Recruit and select student employees**

The amount of time needed to recruit and select the final initial student intern cohort varies based on recruiting activities and the amount of applications received. This can be a long and involved process, particularly due to the amount and quality of students available at the University. One company indicated that it took 3 ½ months to recruit and finally select the first group of 10 interns. Fifty students were interview for 10 positions. The Site Manager recalled that they could have hired twice as many interns since they had to turn away excellent candidates.

**Set up students as company employees for Research Park and corporate operations**

Students should be set up as employees of the company. This can be accomplished through standard company human resources procedures. The Research Park Intern Program is also an option to help facilitate hiring. This program through Corporate Relations provides human resources administration services for companies with interns and GRA positions, including visa documentation.

One company advised that students should be treated like employees and they should act like employees. The following activities will aide establishing students as employees:

- **Give students access to corporate systems and data.**

- **Utilize the same intellectual property practices that are used throughout the company.** Intellectual property stays with the company. Students generally review and sign Non-Disclosure Agreements, Confidentiality and Intellectual Property documentation. An example of a Research Park Internship Program student agreement is available in the Appendix. This document covers topics such as
  - The Confidential Period - five years from the end of the internship with the company;
  - Prepublication Review - no right to publish the results of services performed for the company without prior written permission of the company;
  - Transfer of rights to the company – this includes work product, copyrights, patent rights and other rights

- **Provide training and company orientation.** Although a number of companies have found that interns do a great job from the very beginning, they recommend that students receive training and employee orientation.
What type of leadership and staffing plan is needed for an Innovation Center?

Organizational structure is largely driven by what role the Innovation Center has within the company and the sponsoring corporate organization (e.g., the CTO’s organization or a Corporate Strategy office). The employees in the Research Park operation typically report to departments within a corporation, which are commonly at headquarters of a corporation or other departmental locations. This allows the Research Park team to be a staff extension of an area of technical need within the company.

Companies coming to the Research Park typically hire a Site Manager to lead their operation. Depending on the company and the site operations, other personnel may include full-time engineers, programmers, researchers or project managers. Finally, if student employees are part of the staffing plan, the number of initial student interns and the desired academic disciplines should be evaluated.

The following diagram illustrates an example organizational structure of an innovation center.

---

**Site Manager**

This person is responsible for managing the research and development output of the center, mentoring students working in the center, and working as the University relationship manager for the operation. This person also works on developing relationships with applicable departments and faculty, attends relevant events and technical/industry talks on campus, and helps to identify talent for the operation.

The Site Manager should have managerial experience to help lead the team, even though they may and or may not be the direct supervisor of the employees at the Research Park site. It is common for a Site Manager to help work on mentoring students and encouraging them to consider the corporation as a future full time employment opportunity if they are desirable for the company.
Given the job functions, ideally the Site Manager is someone that understands the company technology area, can navigate corporate management, is intellectually curious and creative in exploring innovation opportunities on campus, and works well with students. A sample job description is included in the Appendix.

Once the Site Manager is identified and hired, typically this person helps to build the team for the operation and works on recruiting other full time talent and students to work in the operation. This person begins navigating faculty/university relationships and making introductions, and determining opportunities to link the company to campus. This person is also involved in planning the office setup and plans for the operational details of the Research Park, but that differs by company and some corporations prefer that to be managed by Real Estate or other support units.

Other full-time staff (as needed)
Depending on the size of the operation, additional full-time staff can be hired to conduct project work and manage student employees. These staff members may have technical expertise and should be familiar with corporate operations and company tools and programs. Full-time staff often directly manages student interns or intern teams, and often helps the team interact with the corporation. These employees are also responsible for mentoring students as interns and as students consider longer-term careers within the organization.

Student interns and project teams
Students often work in project teams or under full-time project leads. In some cases, students with seniority or applicable experience may also serve as leads on intern teams. Student interns support project work and often report directly to a local employee, but they likely also interface with corporate employees within the functional reporting structure.

How else do companies engage with the University?
University engagement can be achieved through partnerships with students and faculty, developing a presence on the campus and providing tours to University and peer groups at the Research Park facility and other corporate locations. Companies can work with faculty members or utilize University facilities and staff for research and development through a variety of approaches. Each option has programmatic, intellectual property and cost considerations.

Establish a Sponsored Research Agreement
• Approach: While government agencies and not-for-profit foundations maintain their leading role as sponsors of research at the University of Illinois, discovery-stage innovation in academic laboratories also is supported by companies that seek to partner with thought leaders and thereby accelerate innovation in their respective commercial fields. Corporate support for academic research comes in many forms, of which financial sponsorship is only one. Companies also share proprietary materials and even technical expertise in furtherance of their and scientists’ shared research goals. While many of these agreements are limited in scope (e.g., a material transfer agreement (MTA) covers the transfer of a single material), others are broad, such as ‘umbrella’ or master research agreements that may facilitate projects from numerous University of Illinois laboratories over a period of years. Each is tailored to meet the specific needs of the UIUC research program that it is intended to support, but certain features common to all such agreements ensure that the mission-directed goals of the University of Illinois, the academic freedoms of its faculty, students and other researchers and the commercial goals of the sponsor are respected and fairly balanced. For example, agreements with industry:
  – Safeguard researchers’ ability to publish the results of their research in accordance with academic custom;
  – Is limited in duration and tied to a specific research plan that is generated by the principal investigator(s);
Typically provides that the University of Illinois owns the results of the sponsored research and all associated intellectual property (IP), e.g., patents, copyrights;

- Grants the company a time-limited option to negotiate licenses to the sponsored IP (i.e., in exchange for fair market value and with appropriate commercial diligence);
- Offers no guaranteed results and limitations on expectation of deliverables;
- Reserves the rights of researchers to use sponsored IP for educational use.

When deciding on projects to support at the University, some companies sponsor research only after they have filtered and explored projects at their own facilities in the Research Park. Companies engage with a faculty member or University department to contract research work that will be conducted on campus. Generally the faculty member or department will assign graduate students to do the research work within University facilities.

- **Intellectual property:** Research done in the context of sponsored research on campus becomes the property of the University of Illinois. The University’s Office of Technology Management may patent new technology resulting from research. While arranging the research agreement, companies must negotiate licensing rights and IP terms with the University. Some companies establish master sponsored research agreements with the University. This enables the company to do research in any department on campus on the same terms.

- **Cost:** Companies should plan for the costs of research and the indirect cost recovery (ICR) rates that are established by negotiation with the federal government. Sponsored projects are grants and contracts where the University receives funds restricted for specific projects. The grants and contracts provide funding for direct project costs and F&A project costs. Direct costs are those costs that can be identified specifically with a sponsored project, an instructional activity, or any other institutional activity, or that can be assigned to such activities relatively easily with a high degree of accuracy. Grant and contract funds pay the direct project costs. In addition, grant and contract funds pay the University a percentage of the direct project costs as a means of providing funding for F&A project costs. The percentage is the “facilities and administrative cost rate” (also called the Indirect Cost Recovery “ICR” rate “overhead” rate, or indirect cost rate). The current ICR rate is 58.6% for work done on the Champaign-Urbana campus. The current University policy for the distribution of sponsored research ICR monies is that the University retains 8% of the ICR funds and distributes 92% to the Campus. Campus then automatically passes on 30% of ICR funds to the home department or college. When the department receives ICR monies it will assess what liens, if any, for graduate assistant tuition and space or administration charges are structured in the funding agreement. After these charges have been subtracted from the ICR funds, the remaining is spent on administrative infrastructure, management of accounts, campus and other reporting and compliance, maintenance of facilities, special infrastructure, or space requirements including set up costs.

**Hire a faculty member as a consultant**

- **Approach:** Faculty members typically have 80% appointments at the University, which means that 20% of their time can be used for other activities such as consulting. Companies negotiate a contract directly with the faculty member to establish a working relationship. This arrangement allows the company to collaborate on research with faculty members using the company’s facilities. The faculty member’s outside work is subject to the University’s conflict of interest and conflict of commitment rules and is not done in their campus facilities.

- **Intellectual property:** Intellectual property typically stays with the company since the work is done at the company’s facility (the company’s Research Park location, for instance) through a private contract.

- **Cost:** Companies generally pay faculty members as consultants with an hourly rate plus expenses.

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Engage with a student practicum/project course

- **Approach:** Some faculty members oversee classes that require student projects. By submitting projects for these courses, companies can get work done under the guidance of a faculty member. Examples of such courses include senior design courses in the engineering curriculum and MBA project courses.

- **Intellectual property:** Project oriented courses often engage corporate sponsors to provide funding and/or specific projects. In those cases, the sponsor may claim ownership of resulting inventions. If so, students must be informed of the requirement to transfer ownership of inventions to the sponsor at the beginning of the semester. Students must agree to such ownership in writing as a condition for working on the project. If the course is a degree requirement, participating students must be presented with a choice of projects, some of which must allow students to retain rights to their inventions. In the event that neither the University nor the sponsor claims ownership, students are free to own their inventions and enter into agreements involving their inventions directly with third parties.

- **Cost:** The costs for these projects vary by department.

Establish a Facility Use Agreement or a Technical Testing Agreement

- **Approach:** By establishing a Facility Use Agreement (FUA) or a Technical Testing Agreement (TTA), companies engage with the University but not with faculty members. A FUA allows company employees access to University lab and testing facilities for company research purposes. A TTA enables a company to contract out basic lab or field tests to University technicians; faculty members are not involved. These agreements can be multi-year agreements, and companies can authorize a certain amount of funds to be spent under these arrangements over a period of time.

- **Intellectual property:** The company maintains the intellectual property under either arrangement.

- **Cost:** In addition to the contract rate for either a FUA or TTA, an ICR rate of 25.3% is applied.

Engage with a faculty member’s startup

- **Approach:** Working with a faculty member’s startup enables access to research and technology through commercial business agreements or partnerships for Small Business Innovation Research (SBIR) proposals. For example, if a faculty member’s startup has licensed technology that a company is interested in, companies can establish an agreement with the startup to access the technology. This arrangement might be a joint development agreement or development contract. Another opportunity for companies is to partner with startups applying for SBIR grants to leverage federal government funding for research and product development.

- **Intellectual property:** Companies negotiate intellectual property rights with the startup.

- **Cost:** Costs vary depending on the arrangement with the startup.

Invest in a faculty member’s startup through a corporate Venture Capital program or other funding mechanism

- **Approach:** Companies invest in startups as part of their long-term research and development strategy. This enables the company to have the startup continue to improve the technology readiness and commercialization progress.

- **Intellectual property:** Companies typically receive equity ownership of the company in the form of stock.

- **Cost:** Costs vary by investment.
**How are physical operations established in the Research Park?**

*Determine site selection and preparation team*
A team of company representatives should be selected to participate in the office suite selection and preparation decisions and activities. This team should be aware of immediate and long-term needs and expectations for the Innovation Center in order to acquire the appropriate amount of space and equip it accordingly. In some cases, corporate Real Estate teams are involved with these decisions and procedures, particularly for equipment purchasing and internal design standards.

*Select and prepare the physical site*
Leasing space in buildings in the Research Park (non-incubator space) is managed by Fox/Atkins Development, the developer of the Research Park. As part of their ongoing agreement and contribution to the Research Park, they maintain available office space at all times that is available for company leasing and opportunities for custom completed suites for corporations. Each company works with Fox/Atkins (FDC LLC is their brokerage) to identify an appropriate location in the Research Park and reach a leasing agreement for the suite. The process for selecting the office site varies by company, and this can impact timing. One company reflected that they had selected an original office location within the park, but then after getting insight from other company representatives, another location within the park was finally chosen.

Depending on the selected site, the suite may require fit out of the space, which typically takes 30-60 days to complete after a lease is signed. There are also existing suites available, which offer move-in ready opportunities. Companies should also consider furniture lead time and other components that can delay setup of operations. A long-term consideration for selecting office space is the expectation of growth. Initial operations may not require much space, but as many companies expect to grow, they will require more office space. Larger options are available in the Research Park, and company representatives will work with Fox/Atkins to plan for future needs.

In general, the Research Park is easily accessible for companies due to custom suite options that can be completed quickly, flexible leasing options, assistance with recruiting talent, and help with establishing campus connections.

### Sample Site Preparation Timeline

<table>
<thead>
<tr>
<th>Space Preparation Activity</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select office space with FDC LLC that meets company needs</td>
<td></td>
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<tr>
<td>Sign a letter of intent agreeing on the basic terms of a lease agreement</td>
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<tr>
<td>Plan a floor plan and layout for the suite with Fox/Atkins architect</td>
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<tr>
<td>Estimate is prepared for fit out of the space</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lease is drafted for the company and reviewed by the company</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lease is executed between Fox/Atkins and Corporation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction begins on office fit out*</td>
<td></td>
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</tr>
<tr>
<td>Furniture and computer equipment is ordered by the company</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Telecom connections and IT equipment installation begins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction walk through allows time for company and Fox to review space</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lease commences, office opens</td>
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</tbody>
</table>

*Typically takes 30-60 days to complete fit out of suite space. Some turn-key existing offices are available.*

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Page 18
Select telecommunications services for the site
The University owns and maintains all telecommunications infrastructure in Phase I – Phase III of the Research Park (generally properties west of First Street). The University is therefore involved in some form with all service provision in
the Research Park. However, both the University and private companies offer telecom solutions to tenants of the Park. Options for buildings that will be developed in Phase IV (east of First Street) are currently being reviewed.

**Telephone service options**
Telephone service for Research Park operations is available from the University or local and national providers. Please see the Appendix for a detailed table of options, costs and considerations.

**Networking options**
Networking for Research Park operations is available from local and national providers. Please see the Appendix for a detailed table of options, costs and considerations.

**Fiber leasing**
The University has fiber from the telecommunications node in the Research Park to each of the buildings in Phases I – III the Park. If spare strands of fiber are available, a company may lease fiber from the University. Leasing fiber does not provide ISP services, but can provide a high-speed point-to-point network within buildings in the Research Park; depending upon the electronics a tenant deploys on either end of the fiber strand(s), speeds may be 100Mbps/1Gbps/or even 10Gbps.

- **Installation cost:** [Dependent upon costs to light up fiber]
- **Monthly lease cost:** $93/strand/hop

**Urbana-Champaign Big Broadband (UC2B)**
The University of Illinois is a partner in the deployment of fiber throughout Urbana-Champaign as part of UC2B. The goal is to create a university-centered network of community institutions and households with high-speed, broadband Internet access. The project is made possible by a $22.5 million competitive grant from the U.S. Department of Commerce’s National Telecommunications and Information Administration, and is one of only two such projects in the U.S. This local broadband network, called UC2B, runs through Research Park at the University of Illinois. UC2B may potentially be linked to similar communities across the country through the US Ignite program. Currently, UC2B has deployed fiber rings throughout the two towns and the University campus, including the Research Park on both sides of First Street. Over the next several years, UC2B may provide tenants of the Research Park more options for telecommunications, including more ISPs, faster connectivity, and possibly, new services. Many of the policies are still being determined by the UC2B governing board, and once those policies are established, these additional services and offerings will become available.

UC2B, in addition to carrying private provider’s bandwidth, may also act as an ISP for those who want them to. A consultant retained by UC2B recommended the following rates (which may vary, depending upon wholesale bandwidth costs and UC2B ISP service adoption by businesses, and other factors).

- **Installation cost:** [probably the cost of installing cable to the facility]
- **Monthly cost:**
  - $115 - $411 (20/20Mbps shared – 80/80Mbps shared)
  - $100 - $1200 (10Mbps private – 1Gbps private)

This local network and the potential for broader connections is a remarkable resource for the region in terms of accessibility and research potential. “The combination of residential and university-centered infrastructure means that UC2B can not only provide broadband service to new customers, it can also set up its own local research environment for testing high-speed applications in a real-world setting.” Furthermore, “locally-headquartered manufacturing companies like Caterpillar and John Deere would likely be interested in applying large-scale analytics to optimize

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2 A “hop” is a traversal from one University telecommunications node to another.
equipment design and customer service models.”³ If US Ignite is successful, it would enable connections between Champaign-Urbana, Chattanooga, Cleveland and other locations doing similar broadband infrastructure projects to create a nationwide network for advanced broadband application development and testing.

**Celebrate with an opening event**

Companies usually celebrate their new facility with an opening event attended by corporate, University, and community stakeholders. University and Fox/Atkins staff can help plan and coordinate an opening event. This includes activities such as marketing, setup, and operational details, to name a few.

**Doing Business in the United States: Quick Guide**

**Business formation**

There is no national law on business formation in the United States. New business entities are created under the law of one of the fifty states or the District of Columbia. The choices regarding jurisdiction and business entity type are up to the party forming the business.

**Entity choice**

A difference between the United States and many other countries is the wide array of business entity forms in America. The most commonly used entity in these situations is the subchapter C corporation. It is used most of the time when there are foreign owners because the parties want the income tax effects to stop at the level of the US corporation as opposed to pass through to the overseas entity. An operation in Illinois for the Chinese corporation will be owned by the Chinese parent company. The only way you could set up the new entity here as an S corporation is if it were owned completely by US citizens and/or residents.

We would suggest engaging an international tax accountant who has knowledge of both the Chinese and US tax issues. After receiving their advice, an attorney can prepare the documents to form the corporate entity. Those documents typically include articles or certificate of incorporation, minutes, bylaws, application for an EIN, possibly a stockholder agreement, and stock certificates.

**General requirements**

The requirements for incorporation can vary from state to state, but incorporation is usually simple, fast and relatively inexpensive in the U.S. The following principles generally apply:

- The US entity must have a local bank account and minimum paid-in capital. Typically the minimum paid-in capital is $1,000 in most states.
- In most cases a corporation can have just one shareholder. This can be a company.
- Corporations have a board of directors and officers. In most states, corporations can have as few as one director. Shareholders, directors and officers can all be foreign citizens and residents in most instances.
- Corporations must have a “registered agent” located in the state of incorporation. This can be a resident manager (foreign or U.S. citizen), a lawyer, or a corporate service company with offices in the state.
- Corporations are required to file an annual report and pay franchise fees in most states. The information on the annual report is usually limited to the name and address of the corporation, the name and address of the registered agent, and the names and addresses of directors and officers. This is filed with the Secretary of State of the state of incorporation, and is public information.

• Except in the case of listed companies and companies in certain regulated industries like banking, there is no statutory audit requirement and no public filing of company financial information.

Tax registration
New companies are required to register with the Federal Internal Revenue Service (IRS) and with the tax authorities of the states in which the company is incorporated or doing business. The IRS issues the corporation a Federal Employer Identification Number (FEIN) which is used for both federal and state tax purposes. This process can usually be accomplished electronically in a day or less.

Depending on the state in which operations are located, other registrations may also be required. A company’s American professional advisers can provide full details.

Federal taxes
Companies operating in the United States will probably be subject to U.S. income tax, and payments to the foreign parent may be subject to withholding requirements. However, federal tax treatment will differ with entities established as solely research and development centers. If a company has employees it will also be subject to strict federal and state tax withholding requirements relating to the wages of those employees. Direct employment taxes for Social Security and Medicare will also arise. The effect of U.S. federal taxes on a company’s global taxation may depend on whether a tax treaty exists between the parent country and the United States.

State taxes and regulations
Most foreign companies entering the United States are surprised by the importance of and lack of consistency among state and local taxes. These taxes take three primary forms and can vary significantly from one state to another. State taxes generally are not covered under tax treaties.

• Real estate tax. This tax is levied against the owners of real estate and is used to finance public schools and local government operations. In the Research Park, taxes have abatements associated with enterprise zones. All property taxes are included in CAM rent.
• Personal and corporate income tax. Many states have some form of personal and corporate income tax and rates can vary substantially.
• Sales tax. Many states impose a tax on the sale of goods at retail. Unlike value added taxes known in much of the world, sales tax does not usually apply to the exchange of goods prior to the final sale.

Social Security and employee benefits
Social Security in the United States is very unlike social programs in most other countries. The program does not provide health or other similar benefits to employees. Instead, it is a retirement income and health benefits program for the elderly and disabled funded by mandatory employer and employee contributions. Most states have employer-funded unemployment and worker injury compensation programs. Unlike many other countries, there are no requirements for healthcare or disability protection, or for paid vacation. However, most employers fund voluntary programs to provide employees with these common benefits.
CONTACT INFORMATION FOR THE RESEARCH PARK

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You Tube Channel: researchparkuiuc

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APPENDIX

Sample budget for a new Innovation Center

The Research Park facilitates corporations establishing initial operations with a small office, which may be led by a Site Director that oversees student projects and helps with University engagement. Typically operations seek to have 6-10 students in the initial year to work on research and development projects. Research Park staff can help with recruiting of full time and student staff to assist corporations. Wages for students vary based on academic areas and graduate vs. undergraduate positions.

Sample Site Proposal for University of Illinois Research Park

<table>
<thead>
<tr>
<th>Suite Square Feet:</th>
<th>1,100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Area Square Feet:</td>
<td>275</td>
</tr>
<tr>
<td>Total Rentable Square Feet:</td>
<td>1,375</td>
</tr>
</tbody>
</table>

Annual Facilities Budget

<table>
<thead>
<tr>
<th>Annual Rent</th>
<th>26,813</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Annual Utilities</td>
<td>4,813</td>
</tr>
<tr>
<td>Estimated Internet Service</td>
<td>960</td>
</tr>
<tr>
<td>Estimated Janitorial Service</td>
<td>1,375</td>
</tr>
</tbody>
</table>

Facility Subtotal $33,960

Annual Workforce Budget

<table>
<thead>
<tr>
<th>Full-time Engineering Site Manager</th>
<th>90,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part-time students (8)</td>
<td>102,144</td>
</tr>
</tbody>
</table>

Workforce Subtotal $192,144

Miscellaneous Supplies & Support $5,000

Total Annual Operating Budget $231,104

One-time Setup Costs*

<table>
<thead>
<tr>
<th>Estimated Furniture Setup</th>
<th>22,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers and Hardware</td>
<td>11,500</td>
</tr>
<tr>
<td>Telecom Wiring for Setup</td>
<td>3,300</td>
</tr>
<tr>
<td>Exterior Signage</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Subtotal One-time Setup $41,800

Note: Workforce costs are determined by the employer, salaries and hourly wages shown provide an example. Each Research Park company hires their own staff, chooses their own furniture, and purchases their own computer equipment.

*Additional costs may be spent on construction for tenant improvements. The developer provides a tenant improvement allowance to construct new suites, but some companies choose to add additional parameters or construction needs that exceed the budget and would be paid by the company at the time of occupancy. Turn-key pre-constructed options are also available.
**Sample Site Director job description**

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Manager, Neustar Innovation Center - UIUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Champaign, IL</td>
</tr>
</tbody>
</table>

## Job Duties (Summary)

The Manager of Neustar Innovation Center at UIUC will focus on driving innovation based on emerging technologies and strategies in academia using interns, research minded university personnel and through faculty relationships.

## Responsibilities/Key Tasks

- Lead, manage and motivate research-minded university personnel to business-oriented goals
- Leverage early emerging technologies and tracking of trends in academia and industry to drive innovation.
- Build relationships with faculty across various scientific disciplines
- Seek and facilitate interaction with start-up companies in the Incubator & Research Park to encourage entrepreneurial thinking among research innovators
- Facilitate and coordinate peer to peer learning to drive learning best practices from other leading corporations that have established R&D offices in the Research Park
- Communicate research ideas and concepts in a business and university context at management and technical levels
- Communicate status and progress reports to management
- Mentor interns and build a talent rich pool for future employment at Neustar

## Qualifications/Education

- Bachelor’s degree in a scientific discipline required, Master’s degree preferred
- 5 plus years of related experience in technology
- Experience working in a university environment, in a role delivering through the development and deployment of new capabilities
- Big Data knowledge a big plus
- Prior experience in Staffing, Supervision, Self-Development, Coaching, Planning, Performance Management, Project Management, and Budget Management a big plus

## Management, Accountability, and Decision-making

For 2012, 7 interns and 2 postdocs will report directly to this position.
## Average student wages and hours in the Research Park

<table>
<thead>
<tr>
<th>Internship area</th>
<th>Lowest hourly wage reported</th>
<th>Average hourly wage reported</th>
<th>Highest hourly wage reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business planning/strategy/competitive intelligence/market research</td>
<td>$10.00</td>
<td>$17.00</td>
<td>$25.00</td>
</tr>
<tr>
<td>Chemistry/chemical engineering</td>
<td>$10.00</td>
<td>$13.90</td>
<td>$21.00</td>
</tr>
<tr>
<td>Computer applications/software development</td>
<td>$8.00</td>
<td>$16.39</td>
<td>$30.00</td>
</tr>
<tr>
<td>Computer networks/hardware</td>
<td>$10.00</td>
<td>$17.50</td>
<td>$25.00</td>
</tr>
<tr>
<td>Electrical engineering</td>
<td>$10.00</td>
<td>$18.20</td>
<td>$30.00</td>
</tr>
<tr>
<td>Finance/accounting</td>
<td>$8.00</td>
<td>$14.31</td>
<td>$20.00</td>
</tr>
<tr>
<td>Marketing/business development/sales</td>
<td>$9.00</td>
<td>$14.33</td>
<td>$20.00</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>$8.00</td>
<td>$14.85</td>
<td>$25.00</td>
</tr>
<tr>
<td>Research &amp; development (scientific/technical)</td>
<td>$10.00</td>
<td>$19.00</td>
<td>$29.82</td>
</tr>
</tbody>
</table>

### Average Student Wage (not weighted): $18.19

*Students typically work 10 to 20 hours during the school year and full time during the summer.*

### Compensation Summary

The following tables show the lowest, average, and highest response to the questions asking about Low, Average, and High Hourly Wage. This demonstrates the range of wages offered for each class level.

#### Bachelor's Compensation
Based on 21 responses

<table>
<thead>
<tr>
<th></th>
<th>Lowest response</th>
<th>Average response</th>
<th>Highest response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>$7.00</td>
<td>$11.00</td>
<td>$16.00</td>
</tr>
<tr>
<td>Average</td>
<td>$8.00</td>
<td>$12.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>High</td>
<td>$8.00</td>
<td>$16.00</td>
<td>$28.00</td>
</tr>
</tbody>
</table>

#### Master's Compensation
Based on 18 responses

<table>
<thead>
<tr>
<th></th>
<th>Lowest response</th>
<th>Average response</th>
<th>Highest response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>$9.00</td>
<td>$17.00</td>
<td>$30.00</td>
</tr>
<tr>
<td>Average</td>
<td>$9.00</td>
<td>$18.24</td>
<td>$30.00</td>
</tr>
<tr>
<td>High</td>
<td>$9.00</td>
<td>$21.44</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

#### PhD/PostDoc Compensation
Based on 15 responses

<table>
<thead>
<tr>
<th></th>
<th>Lowest response</th>
<th>Average response</th>
<th>Highest response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>$9.00</td>
<td>$17.75</td>
<td>$32.00</td>
</tr>
<tr>
<td>Average</td>
<td>$9.00</td>
<td>$21.47</td>
<td>$33.00</td>
</tr>
<tr>
<td>High</td>
<td>$9.00</td>
<td>$24.75</td>
<td>$36.00</td>
</tr>
</tbody>
</table>
The Board of Trustees of the University of Illinois (University) has entered into a Science and Technology Internship Program Agreement ("Agreement") with Deere and Company (Company) dated May 15, 2008 to provide internship opportunities to University students within a Company facility located in the UIUC Research Park.

Company is reimbursing University its direct and indirect costs for your internship for the period set forth in your appointment letter under which you were offered this Internship. Though not an employee of Company, you will be assigned by Company to perform various authorized services under the direction of your Coordinator of Interns.

The Agreement contains certain obligations regarding protection of Company's Confidential Information which must be undertaken by each Intern, and additional obligations which are the personal responsibility of the Intern. As a University Intern, your signature on this document indicates your understanding and acceptance of the terms described below:

1. During the term of this agreement, the performance of authorized services may require access to certain proprietary or confidential information of Company. "Confidential Information" includes, but is not limited to, any nonpublic device, prototype, graphics, design, drawing, software, code, documentation, product plans, business plans, nonpublic financial information, written information or information or work product in other tangible forms that is disclosed to you by Company or created by you, conceived by you or reduced to practice in the performance of services or work for Company.

2. Unless otherwise expressly authorized by Company, you agree to retain the Confidential Information in confidence for the "Confidential Period" defined below, during which Period you shall not disclose the Confidential Information to any third party and shall not use the Confidential Information for any purpose other than performing authorized services for Company. You shall use reasonable care in protecting the confidentiality of the Confidential Information from unauthorized disclosure or use, including compliance with all policies and procedures of Company regarding Confidential Information.

3. The "Confidential Period" shall mean five (5) years from the end of your internship with Company or until such time as the information no longer qualifies as Confidential Information pursuant to Paragraph 4 below. You acknowledge that some Confidential Information and Work Product may qualify for protection as a trade secret under applicable law. Accordingly, you have no right to use or to publicly disclose the Confidential Information after the Confidential Period, without the prior written consent of Company. This provision shall survive any termination or expiration of this Agreement or the Confidential Period.

4. You shall not have any obligation of confidentiality with respect to information that:
(a) Was already in your possession on a nonconfidential basis prior to receipt from Company; and/or
(b) is in the public domain by public use, general knowledge or the like, or after disclosure hereunder, becomes general or public knowledge through no fault of you; and/or
(c) is properly obtained by you from a third party not under a confidentiality obligation to Company; or
(d) is explicitly approved for public release by written authorization of Company.
(e) is ordered to be produced by a court of competent jurisdiction or appropriate regulatory authority or as otherwise required by law.

5. You shall return to Company, upon completion of your internship, any devices, graphics, writings, and information in other tangible forms containing any of the Confidential Information referred to above, and any copies of such Confidential Information (or alternatively, at Company’s direction to destroy such Confidential Information and verify its destruction in writing).

6. No license, express or implied, in the Confidential Information is granted to you other than to use the information in the manner and to the extent authorized by this Nondisclosure Agreement and the Internship Program Agreement.

Prepublication Review
You shall have no right to publish the results of authorized services performed for Company without prior written permission of Company. In the event such permission is granted, you agree to submit all publications to Company for prepublication review at least 30 days in advance of publication, and to remove before publication any Company Confidential Information identified by such review in accordance with the Agreement.

Inventions, Patents and Works of Authorship
"Work Product" shall mean all computer programming code, documentation and other materials, designs, documents, drawings, data files, computer programs and/or modifications thereto (including both source code and object code) and other works of authorship resulting from your performance of services in accordance with this Agreement. Works of authorship shall include, but shall not be limited to, textual items, audio and/or visual items, graphical items and/or computer programs, whether fixed in magnetic or optical media or document form.

In accordance with the Agreement, and in consideration for the training provided and internship costs paid by Company and for no additional compensation whatsoever, you agree (a) to assign promptly or transfer promptly all title, right and interest to Work Product, and all copyrights, patent rights, and other proprietary rights therein to Company, (b) to review promptly and execute promptly such documents as may be reasonably requested by Company to confirm, to acknowledge, to publicly record, or to formally document Company’s ownership of all right, title and interest in such Work Product, and any or all proprietary rights therein, (c) to cooperate with Company and to review and execute promptly such documents as may be reasonably requested by Company to secure patent protection or other statutory protection anywhere in the world for such Work Product or proprietary rights therein, and (d) to deliver promptly and fully disclose all Work
Product, and proprietary rights therein, to Company upon conception of the proprietary rights, and upon creation or development of the Work Product and proprietary rights therein.

In accordance with the Agreement, and in consideration for the training provided and internship costs paid by Company, you agree to promptly and fully disclose to Company all inventions and discoveries you make as a result of performing the authorized services or derived from Company's Confidential Information and assign to Company without additional compensation all rights to such inventions, to applications for letters patent, and to letters patent granted upon such inventions. You assign to Company all ownership and copyrights in any works of authorship created in the course of the internship and waive all moral rights in such works.

You shall acknowledge and deliver promptly to Company (without charge, but at the expense of Company) such written instruments and do such other acts as may be necessary in the reasonable opinion of Company to obtain and maintain letters patent and to vest the entire right and title in same and in the works in Company. If you have any questions regarding the terms of this Agreement contact the Office of Sponsored Programs and Research Administration (333-2187) for assistance.

By your signature below, you represent that you are at least 18 years of age, that you have read and understand the terms of this Agreement, and that you agree to abide by them. If any term, clause or provision of this Agreement is held invalid or unenforceable by a court of competent jurisdiction, such invalidity shall not affect the validity or operation of any other term, clause, or provision and such invalid term, clause or provision shall be deemed to be severed from this Agreement. The rights and obligations under this Agreement are personal to you and shall not be assigned without the written consent of Company. This agreement shall not be modified or amended except in writing signed by the parties hereto and specifically referencing this Agreement.

Intern

____________________________
Signature

____________________________
Name printed or typed

____________________________
Date
# Research Park telephone service options

<table>
<thead>
<tr>
<th>Provider</th>
<th>Description</th>
<th>Costs</th>
<th>Additional Considerations</th>
</tr>
</thead>
</table>
| **University of Illinois**    | The University can provide telephone service to companies in the Research Park. Phone service from the University is a package that includes call forwarding, three-way calling, caller ID, optional Voicemail and other features. Long distance is provided by AT&T. University phone service does not require a contract. | - Initialization cost: $50<sup>4</sup>  
- Monthly cost: $23/month (Voicemail is an additional $5/month)  
- Contract: Month-to-month | University phone numbers are NOT portable, and can be taken into the Research Park, but cannot be taken outside of the Park or campus. The University itself has moved to Unified Communications, which utilizes IP-based telephony, but tenants of the Research Park who request University phone service will get POTS (Plain Old Telephone System) lines. |
| **Champaign Telephone Company** | Champaign Telephone Company (CTC) offers IP-based telephone service. CTC phone service includes rental of a telephone handset, and includes features such as call forwarding, caller ID, Voicemail, and 250 minutes of domestic calling. CTC-provided phone numbers are portable outside of the Research Park. Discounts apply to internet service from CTC when bundled with phone service (see Networking, below). | - Initialization cost: none  
- Monthly cost: $75 - $25 depending upon number of phones.  
- Contract: month-to-month | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| **Local Exchange Carrier**    | AT&T can provide local phone service to tenants of the Research Park. Phone plans include a la carte offerings of services (such as call forwarding, three-way calling, etc.). In addition to paying the monthly fees to AT&T, tenants also must pay the University a $12/line transport fee for AT&T’s use of University telecom infrastructure to deliver the line. This fee will be billed by the University to the tenant. | - Installation cost: Determined by local provider  
- Monthly cost: Determined by local provider  
- University transport fee/month: $12 | The University must coordinate with AT&T to make sure phone service is delivered to the tenant. After ordering phone lines from AT&T, the IT Manager at EnterpriseWorks must be contacted to ensure timely completion of the phone line to the tenant’s suite. |

<sup>4</sup> The initialization fee covers only activation of the phone number. Wiring costs, if necessary, are the responsibility of the tenant.
**Research Park networking options**

Unless otherwise noted, the networking options below include high-speed connectivity to the Illinois campus via UIUCnet, generally at speeds of 100 Megabits/second (Mbps) or 1 Gigabit/second (Gbps), depending upon the electronics installed in each building. Bandwidth to anywhere outside the Illinois campus is restricted to the bandwidth subscribed to, at rates listed below, or supplied by the network provider.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Description</th>
<th>Costs</th>
<th>Additional Considerations</th>
</tr>
</thead>
</table>
| CTC      | CTC offers networking to tenants in the Research Park at costs that vary depending upon bundling (with their phone service) and volume. | Networking only (no phones):  
* Installation fee: none  
* Monthly fee: $75/Mbps  
* Contract: month-to-month  
  Networking with CTC IP-based phone service:  
* Installation fee: none  
* Monthly fee: $39/Mbps  
* Contract: month-to-month | N/A |
| National long-distance carriers | Most long-distance telecommunications providers (AT&T, Sprint, etc.) offer high-capacity phone lines for networking. The most popular services have traditionally been T1 lines (1.544 Mbps) and partial or whole DS3 lines (maximum capacity 44.736 Mbps). These offerings are typically utilized by large corporations, all of whose offices are connected in this way, though they are available to anyone in the Research Park. Currently, two corporations within the Park utilize DS3 lines, with a greater number utilizing at least one T1. Some corporations have negotiated much lower costs for high-capacity lines due to the volume they lease. The costs are set by the carriers who should be directly contacted for a quote. | Because these T1 and DS/3 lines travel over University network infrastructure from the edge of campus to the building in the Park, the University charges an installation fee and monthly transport fee to tenants contracting for these services.  
* T1 line:  
  * Carrier installation cost: (contact carrier for pricing)  
  * Carrier monthly cost: $250-500 (typical--contact carrier for pricing)  
  * University Installation cost: $300-600  
  * University Monthly transport fee: $125  
* DS/3 (partial or whole):  
  * Carrier installation cost: (contact carrier for pricing)  
  * Carrier monthly cost: $1500 (typical--contact carrier for pricing)  
  * University Installation cost: $4,200  
  * Monthly transport cost: $344 | Provisioning a high-capacity line requires close coordination among the long-distance telecom provider, the local exchange carrier (LEC), and the University of Illinois. If considering deploying T1 or DS/3 lines, please contact the IT Manager at EnterpriseWorks before placing the order with the long-distance provider (preferably) or immediately after placing the order, to obtain facilities assignments for the connection in the University’s telecommunications node. Delays will result in completing the installation if the University is not informed in a timely manner of the planned installation. |
<table>
<thead>
<tr>
<th>Provider</th>
<th>Description</th>
<th>Costs</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Label Protocol Switching</td>
<td>Multi-Label Protocol Switching (MPLS) is a method of networking that can improve speed, avoid network congestion, and provide virtual private network capabilities without utilizing traditional T1s or DS3s. They are relatively new to the Research Park. Like T1s and DS3s, the MPLS connection must be dropped by the carrier at the edge of campus, and then transported via fiber to the Research Park building.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
| Comcast                       | Comcast has a cable presence in the Atkins Building and TDFC Building and can offer internet, voice, and television offerings. Comcast has a variety of offerings in their Business Class product line.                                                                 | Installation cost: [contact Comcast]  
Monthly cost: $60-$370 (12Mbps/2Mbps – 100Mbps/10Mbps) | Comcast does not currently peer with the University, so networking to other Research Park buildings or places on campus will be confined to the speed contracted for. |
| Layer-2 Networking            | The University has recently deployed a service which allows any Internet Service Provider (ISP) that has a presence in the University’s telecommunications node at the edge of campus to provide networking to Research Park tenants by “riding” over the University network infrastructure, which currently exists to all buildings in Phases I – III in the Research Park. This is a partnership between the University’s networking provider, CITES, who will maintain the service, and the Research Park, who has purchased the hardware necessary for it. Service will be arranged directly with the provider, who will bill the Research Park tenant directly. | *Pavlov Media service:*  
Installation fee: $375  
Monthly fee:  
– $100 for up to 10 Mbps  
– $675 for up to 50 Mbps  
– $3500 for up to 100 Mbps  
Contract: month-to-month | Layer 2 networking may become available in the Phase IV area of the Park, dependent upon the presence of University fiber within the existing and planned UC2B deployment. |
**Research Park Tenant Application**

**Section I. Company Information**

Company Name (Applicant):

Company Address:

<table>
<thead>
<tr>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

City | State | Zip Code |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phone: __________________________ Fax: __________________________

E-Mail: __________________________ Website: __________________________

Contact Person: Name __________________________ Title __________________________

Legal Structure of Business: __________________________

<table>
<thead>
<tr>
<th>Industry:</th>
<th>Biotechnology</th>
<th>Healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical</td>
<td>Material Sciences</td>
<td></td>
</tr>
<tr>
<td>Computer Hardware</td>
<td>Microelectronics</td>
<td></td>
</tr>
<tr>
<td>Computer Software</td>
<td>Pharmaceuticals</td>
<td></td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>Telecommunications</td>
<td></td>
</tr>
</tbody>
</table>

Specify Other: __________________________

Present Number of Employees: __________________________

Name of Parent Company: __________________________

Parent Company Address:

<table>
<thead>
<tr>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

City | State | Zip Code |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section II: Proposed Activities of Tenant

What is your Desired Date of Occupancy?:

What is the Net Rentable Square Footage (NRSF) Desired?:

What Share of NRSF Will be Utilized for?:

| Customer Relations | __________________________ |
| Fabrication        | __________________________ |
| Lab (Wet & Dry)     | __________________________ |
| Office             | __________________________ |
| Research & Development | __________________________ |
| Shipping & Receiving | __________________________ |
| Other(Specify)     | __________________________ |

Projected Number of Employees at Premises: Professional _______ Other ________

Provide a Brief Description of Anticipated Truck Servicing Requirements:

### Section III: General Information

Provide a Brief Description of Your Product/Business:

提供产品/业务的简要描述:

Provide a Brief Description of Research That Will be Conducted on the Premises:

提供将在该设施进行的研究的简要描述:

What Type of Relationship Do You Have With the University (If None, Please Enter Type You Are Interested in Establishing):

提供您与大学的何种关系（如果没有，请输入您感兴趣的类型）
This Tenant Application is submitted on behalf of Applicant this ___ day of ________________, 20__. It is Applicant’s intention to be in compliance with the Permitted and Prohibited Uses of the Research Park during its tenancy. The Permitted Uses and the list of Pre-approved and Prohibited Uses are attached to this Tenant Application.

By: ________________________________  
Signature

Name: ________________________________

Title: ________________________________

Approval:

The Tenancy of Applicant as set forth in this Tenant Application is approved this ___ day of ________________, 20__ by the University of Illinois, or its designee, subject to Applicant’s compliance with the Permitted and Prohibited Uses and the Declaration of the University of Illinois Research Park.

By: ________________________________  
Signature

Name: ________________________________

Title: ________________________________

Permitted Uses

The operations or functions of Tenants to be located in the Research Park shall be substantially research and technology oriented, and desirably have a demonstrable and on-going relationship to the University. Such uses shall include: (1) the conduct of activities that are substantially “research”; (2) the conduct of activities that are primarily “product development”; (3) the conduct of activities that are primarily “high technology”; (4) the conduct of prototype manufacturing, carried out in support of the activities enumerated above; (5) the conduct of assembly of components compatible with the kind of activities enumerated above; (6) the conduct of office and administrative functions related to any of the above activities; (7) activities clearly having a primary educational orientation; and (8) other uses requiring substantial interaction with the University in the form of agreements or contracts for University services or resources.

The University may authorize the following special uses by Tenants for occupancy in the Research Park when it determines that such occupancy will be beneficial to the objectives of the Research Park: (1) activities that are technologically oriented and have a high degree of compatibility with the Research Park uses outlined above; (2) service activities, including business and employee services, that are related primarily to research, development and technical manufacturing, and that would benefit other Research Park occupants by being located in the Research Park; (3) offices of high quality companies or agencies whose location in the Research Park is deemed beneficial to the purpose of the Research Park. The list of pre-approved Office Uses below shall be deemed to be permitted, subject to the review and approval of Leases by the University.

The University may authorize auxiliary uses that will clearly serve the everyday needs of the Tenants in the Research Park, including auxiliary services, provided the space devoted to auxiliary uses, including retail uses, comply with the University Credit and Retail Sales Act. The list of pre-approved Auxiliary Uses below shall be deemed to be permitted, subject to the review and approval of Leases by the University.
List of Pre-approved Uses

(a) Office Uses
Accountants; advertising; architects; engineers; attorneys; banks; business consultants; computers; data system consultants; employment agencies; financial planning; internet providers; management consultants; marketing consultants; travel agencies.

(b) Retail Uses
Convenience stores under 1,600 square feet of floor area; bakery stores; barbers; beauty salons; book stores; candy, ice cream, dessert and confectionery stores; caterers; copy and duplicating; dry cleaners; florists; gift shops; health and diet food stores; health clubs; drug stores under 1,600 square feet of floor area; photo finishing shops; restaurants; travel agencies; coffee shops; packaging and shipping; and daycare facilities. Drive through facilities and large external signage will not be permitted.

Prohibited Uses

Notwithstanding the above descriptions of permitted uses characteristics, the following uses are prohibited as not being consistent with the stated mission for the Research Park, including: warehouse and distribution, heavy manufacturing or manufacturing not related to primary research and development operations in the Research Park, initiative or reactive telephone marketing centers, insurance, bank and other “back office” processing centers, retail uses other than those permitted as “auxiliary uses,” and medical uses except for small retail or biomedical services consistent with Research Park intentions.