

September 30, 2016

Illini Union, Main Quad, UIUC



National Center for Supercomputing Applications (NCSA)



Carl R. Woese Institute for Genomic Biology (IGB)



Research Park



## High Tech Innovation at UIUC

The University of Illinois at Urbana-Champaign (UIUC) has a long **tradition when it comes to technology and innovation**. The campus is cited in the epic film “2001: A Space Odyssey” (1968), by Stanley Kubrick and Arthur C. Clarke, more specifically at HAL’s shutdown scene:

*“I’m afraid, Dave. Dave, my mind is going. I can feel it. (...) I’m a...fraid. Good afternoon, gentlemen. I am a HAL 9000 computer. I became operational at the H.A.L. plant in **Urbana, Illinois** on the 12th of January 1992”.*

The film was one of the first to explore the subject of Artificial Intelligence (AI) and its potential consequences to humankind – and UIUC was, back then, the chosen “place of birth” for HAL, the supercomputer that controlled the spacecraft and interacted with the crew. In fact, this choice was well-deserved. The University was one of the pioneers in the field. Its first supercomputer – ILLIAC (ILLinois Automated Computer) – became operational in 1952.

Nowadays, the University continues to nurture innovation. In fact, UIUC is consistently ranked among the top 5 universities for NSF-funded research and its **total annual research funding exceeds US\$600 million**.

**National Center for Supercomputing Applications (NCSA)** – Currently, UIUC is home to Blue Waters, one of the most powerful supercomputers in the world and **the fastest supercomputer on a university campus**. Scientists and engineers across the country use the computing and data power of Blue Waters to tackle a wide range of challenging problems, from predicting the behavior of complex biological systems to simulating the evolution of the cosmos. Blue Waters has more than 1.5 petabytes of memory, more than 25 petabytes of disk storage, and up to 500 petabytes of tape storage.

**Beckman Institute for Advanced Science and Technology** – The Institute is a 313,000 sq-ft interdisciplinary institute devoted to leading-edge research in the physical sciences, computation, engineering, biology, behavior, cognition, and neuroscience. It is focused around 4 research themes: (i) Integrative Imaging, (ii) Intelligent Systems, (iii) Molecular Nanostructures, and (iv) Electronic Nanostructures.

**Carl R. Woese Institute for Genomic Biology (IGB)** – The IGB, established in 2007, is a \$75 million, 186,000 sq-ft state-of-the-art facility dedicated to transformative research in agriculture, human health, the environment, and energy use and production.

Over the last 15 years, the UIUC has made an incredible progress in building a **vivid high-tech ecosystem** and promoting **tech transfer from academia to the industry**.

The **Office of Technology Management** is responsible for managing the intellectual property generated by research and educational activities at the University. The Office seeks to guide technologies through every appropriate stage of the commercialization process.

**Entrepreneurship** flows from the classrooms to **Research Park**, home to 100+ companies and growing. In fact, Research Park has a unique feature: **it houses from R&D centers of big corporations to student-founded startups**.

You will learn more about Research Park and this amazing ecosystem in our next newsletters. Stay tuned!