Cornell’s Research Serves the Region and Beyond

Small Business Development
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The economic future of Tompkins County and central New York will be shaped by the success of technology transfer from Cornell University to the local business community.

Michael S. Hall
Founder
CEA Systems
The tangible benefits of a university’s research are extraordinary. When Cornell faculty teach and perform services for the community within their domain of expertise, we immediately understand these benefits.

But when Cornell faculty conduct research and that research materializes into a cure for a disease, a better medical procedure, a new green product, or a faster and more compact computer, we connect with the extraordinary potential of academic research.

The path of the “what if…” and “I wonder why…” that begins in the laboratory, translated into discoveries and inventions, and then transferred into products by small businesses leads us to a deeper appreciation for how university research brings a multitude of improvements to our daily lives. Even more, by the time the research leaves the laboratory bench—en route to becoming a product—it has also created an optimal learning experience for many undergraduate, graduate, and postdoctoral students and some community members along its path. These are frequently the people, sometimes along with faculty, who bring the innovations to market in the form of a small company that, in turn, hires employees—some from Cornell’s research labs after completing their degrees and some from the community and beyond. This process—technology transfer—completes the research connection.
Cornell’s Research Serves the Region and Beyond: Small Business Development brings together the research, the entrepreneurs, the companies, and the products. These nanotechnology, biotechnology, high-tech materials, hi-tech agriculture and food, and other businesses help provide an anchor for the nation’s wealth. The booklet documents 126 companies with ties to Cornell’s extensive academic resources—its people, research, and facilities:

- they licensed Cornell inventions and discoveries;
- they were founded within the region by Cornell faculty, staff, students, and alumni; or
- their proximity to Cornell’s academic resources is beneficial to their success.

With $668+ million (FY 2008) in research expenditures and start-up companies translating research and technology into products, services, and jobs, Cornell’s research increasingly helps to secure the region’s prosperity.

Cornell University thanks the companies participating in this project.

Robert A. Buhrman
Senior Vice Provost for Research
Cornell University
In an increasingly competitive marketplace where companies rely on new product ideas to maintain a competitive edge, university intellectual property is valuable. Cornell innovations are a rich source of intellectual property for entrepreneurs and industry partners looking for new opportunities. The Cornell Center for Technology Enterprise and Commercialization (CCTEC) connects industry partners to these technological innovations created by Cornell researchers. Supporting faculty at Cornell’s main campus (Ithaca, New York), Cornell’s Geneva campus (Geneva, New York), and the Weill Cornell Medical College (New York City), CCTEC facilitates the commercialization of Cornell technologies. CCTEC secures the proper intellectual property rights protection and markets and licenses the technologies to businesses. CCTEC is committed to developing Cornell innovations into commercially and socially valuable products.
Cornell innovations play a critical role in product development across many industries. Companies from start-ups to the Fortune 500 license Cornell’s innovations. In keeping with Cornell’s land grant mission to boost the regional economy, CCTEC helps create new businesses based on the university’s innovations. CCTEC exposes Cornell technology ideas to worldwide venture capital and management talent, connecting local inventors and entrepreneurs to capital, which creates jobs and attracts investment to New York State.

**CCTEC in Action**
Technology transfer begins with building relationships. CCTEC professionals interact with Cornell faculty and administrators, patent counsel, industry representatives, entrepreneurs, investors, and government officials. Reflective of Cornell’s broad research endeavors, CCTEC manages inventions from a wide range of disciplines, including veterinary medicine, nanoscale engineering, chemistry, plant breeding, materials science, and medicine. CCTEC has licensed Cornell technologies to industry partners from all 50 states, Europe, Asia, the Middle East, and Central and South America. Cornell inventions are patented in more than 40 countries.
CCTEC’s Technology Transfer Process

**Disclosing**
- Cornell research, scholarship, or other activity yields a novel discovery, tangible object, article, or idea
- Inventor submits an Enabling Invention Disclosure form to CCTEC describing the invention with proper sponsor information
- TCLO* conducts initial review to:
  - determine additional information needs
  - determine protectability of invention
  - perform market and landscape research
  - assess marketability and commercial potential
- TCLO formulates a strategy for marketing and licensing the invention (Statutory protection may be pursued if necessary for commercial success)
- TCLO makes recommendations for marketing, licensing, and protection strategies to the vice provost for technology transfer and economic development for approval and modifications

**Licensing**
- Marketing of Invention
  - potential licensees are identified
  - TCLO negotiates license agreement
  - university executes agreement with one or more licensees
- Licensee
  - develops invention
  - commercializes products
  - pays license fee according to license agreement
- CCTEC distributes net revenue in accordance with inventions and related property rights policy
- License agreement terminates
  - in accordance with its terms, typically no later than expiration date of patent or other legal protection

**Protecting**
- Documentation for patent application is created, filed, and managed in prosecution of the application
- Patent or other protection is issued
- Maintenance fees due for patents: TCLO reevaluates decision to maintain patent—U.S. patents at 3 1/2, 7 1/2, and 11 1/2 years from date of issue, and foreign patents annually
- U.S. patent expires 20 years after effective filing date

Invention rights offered to inventor if CCTEC decides not to pursue any commercialization. CCTEC closes docket if inventor refuses invention rights, invention is put in the public domain for public free use.

Frank DiMeo

*TCLO: technology, commercialization, and licensing officer
The Cornell Center for Life Science Enterprise is a designated New York State Foundation for Science, Technology, and Innovation (known as NYSTAR) Center for Advanced Technology (CAT). Originally established in 1983 as the Center for Advanced Technology in Biotechnology, it was one of the 10 original CATs in New York State.

There are 15 NYSTAR-designated CATs in the state with a common mission: “to capitalize on New York’s outstanding university research resources and use those resources to create jobs and opportunity.” The Cornell CAT pursues programs that address specific economic development needs of biotechnology and life sciences industries, especially small and start-up businesses. These needs include research and development, education and training, and technology development and transfer.

The Center for Life Science Enterprise supports industry-initiated R&D projects for Cornell faculty in partnership with New York companies, as well as faculty-initiated cutting-edge projects. CAT-funded projects represent many diverse disciplines in the biological, biomedical, computational, engineering, and physical sciences. Since its inception in 1983, the center has assisted with more than 49 company formations based on Cornell technologies funded by the CAT. The Center for Life Science Enterprise has leveraged NYSTAR support with industrial and other state and federal government funding.
In addition to funding projects, the Center for Life Science Enterprise offers a host of services to help companies. The Life Sciences Core Laboratories Center (CLC) provides an array of genomics, proteomics, imaging, IT, and informatics shared research resources and services to the full community of investigators on and off campus. The CLC also offers a concentration of advanced life sciences instrumentation and expertise in their applications, as well as training for students, faculty, and industry researchers.

Other services provided to companies at all stages of development include business planning, assistance with the federal SBIR funding program, and workforce development. In addition, the CAT collaborates with other centers and programs at Cornell, such as Entrepreneurship@Cornell, CCTEC, and Cornell Center for Materials Research (CCMR), as well as companies and resources across the state, to provide connections among research, education, training, and commercialization for economic impact. Whether one is a budding entrepreneur with a great idea looking to get started, a start-up company looking for business assistance, or an established business looking for collaborators or additional assistance, the Cornell CAT can help find the resources needed, along with other helpful resources one may have been unaware were needed.
BR Legal (BRL) offers legal services to emerging growth-oriented businesses. Through BRL, Cornell Law students provide legal services under the direct supervision of attorneys experienced in business law. BRL assists entrepreneurs with business law issues, such as:

- Choosing an appropriate type of business entity
- Legal formation of the business entity
- Simple contract drafting
- Trademark filings
- Establishing equity incentive and related stock-based compensation plans

BRL does not represent parties in litigation, and it does not practice before the U.S. Securities and Exchange Commission.

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Zachary J. Shulman
Executive Director
The Cornell Business and Technology Park is the area’s premier suburban office park. It provides a first-class environment for local, national, and international offices and research firms, and it serves as an interface between Cornell University and the business community. More than 80 tenant companies support more than 1,400 jobs. Sixty-two percent of the companies are technology-based, and many conduct research associated with or derived from Cornell. Established in 1951 with significant growth since 1986, the 300-acre development hosts 24 buildings and a million square feet of space, including a large concentration of wet labs and clean rooms.
The Cornell Agriculture and Food Technology Park, known as the Technology Farm, is a 72-acre research park located adjacent to the New York State Agricultural Experiment Station. Opened in November 2005, the park is designed to foster the creation of innovative technologies related to agriculture and bio-based and food industries. In this environment, start-up companies, small businesses, and large multinational companies can leverage the resources and intellectual capital available at Cornell University, the New York State Agricultural Experiment Station, and other regional centers of expertise. Within the Technology Farm’s “IP-Free Zone,” the development and unfettered ownership of intellectual property makes for an exceptionally business-friendly climate.

The Cornell Agriculture and Food Technology Park campus features a 20,000-square-foot, multi-tenant flex technology incubator. Thirteen businesses call Flex Tech I their home. The park developed three pilot production plant areas in 2006, including a new Food and Beverage Innovation Center. These pilot production areas enable the park’s tenants to take newly developed products from the laboratory into a commercial production environment. In 2007 the Technology Farm was named Intelligent Facility of the Year by the Intelligent Community Forum in a highly competitive, international awards process.
Kionix shipped more than 30 million inertial sensors—which enable such features as motion-based gaming, mobile handset user interface, personal navigation, and hard disk drop protection—to leading manufacturers worldwide in 2008 for integration into highly popular consumer products.
Companies in Tompkins County

Small Business Development

CCTEC Denotes current license(s) for Cornell technology through CCTEC
Achronix Semiconductor Corporation builds some of the world’s fastest field programmable gate arrays (FPGAs), which use a unique, patented circuit technology from Cornell. The products, with a 2GHz throughput, provide a significant performance advantage over existing FPGA technology. Target markets for Achronix FPGAs include communications, networking, high-performance computing, digital signal processing, aerospace and defense systems, medical imaging, and a growing range of other areas.

Achronix Semiconductor designs and manufactures two principal product lines: the Achronix-ULTRA line of ultrafast FPGAs, operating at near 2GHz, and the Achronix-XTREME line of fast FPGAs, designed to operate near 1GHz in high radiation and extreme temperature environments.

**Cornell Connection**

Achronix Semiconductor licensed the company’s founding technology, developed by a faculty member of the School of Electrical and Computer Engineering.
Advanced Design Consulting USA Inc. (ADC)

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Lansing, NY 14882  E: adc@adc9001.com

Advanced Design Consulting USA Inc. is an engineering and scientific consulting firm providing solutions to complex problems. The company provides devices, integrated systems, and a broad array of high-precision components and instruments to commercial, academic, and government agencies worldwide.

Cornell Connection
The president and founder of ADC received degrees from Cornell’s College of Engineering and the Johnson Graduate School of Management. ADC has conducted research and participated in other collaborations with the Cornell Nanofabrication Facility, Cornell High Energy Synchrotron Source (CHESS), and Cornell Center for Materials Research. ADC collaborates with many faculty members at Cornell University.
APM Testing does materials testing and failure analysis to improve quality control in a broad range of industries, including automotive, aerospace, computer, chemical, railway, medical, military, tool and machinery, and consumer products. Testing, analysis, identification, and certification are done on metals, plastics, rubbers, circuit boards, ceramics, paints, lubricants, adhesives, and coatings. The company also honors requests for custom testing. Accreditations include A2LA (ISO/IEC 17025), Boeing, Bombardier/Canadair, Parker Hannifin, and Pratt & Whitney.

APM Testing does materials testing and failure analysis for companies around the world. The company’s work helps to ensure product quality, safety, and reliability in trains, cars, airplanes, electronics, and a variety of consumer goods.

Cornell Connection
The company’s founder and its quality assurance manager received doctorates from Cornell. The university’s facilities provide broader opportunities to generate information for customers.
On June 15, 2007, Advion BioSciences Inc. held a ribbon-cutting ceremony and grand opening event for its new corporate headquarters facility in the Cornell Business and Technology Park. The new facility combines its two subsidiaries while providing room for growth.

Advion BioServices provides pharmaceutical and biotechnology partners with drug development and drug discovery, LC/MS/MS bioanalytical, sample management and storage, dose formulation analysis, and immunoassay services. The company determines drug concentrations in biological samples from drug metabolism and pharmacokinetics studies for method development, method validation, and biological sample analysis. Advion BioSystems is a leader in microfluidics systems. It develops and sells the TriVersa NanoMate, an automated chip-based system designed to boost the data quality and productivity of sample analysis for proteomics, biomarker discovery, and metabolite identification research for which mass spectrometry is used.

Cornell Connection
The company’s chief scientific officer and chairman, a professor emeritus of analytical toxicology in the College of Veterinary Medicine, developed the LC/MS/MS technology used at Advion. The company maintains research interactions with the university and lists Cornell’s resources among the factors crucial to the company’s success.
Agave BioSystems is a biotechnology company with laboratories in Ithaca, New York, and Austin, Texas. The company’s mission is the integration of the specificity and extreme selectivity of biological systems with the precision and scale engendered by micro and nanofabrication technologies. The company aims to develop miniaturized, highly effective, field-portable biosensors and analytical instruments. Agave BioSystems is engaged in a number of research projects in which biological components for sensor systems are tailored to complement ongoing work in micro and nanofabrication. Many of these sensors are being developed to combat biowarfare/bioterrorist agents or for use in space applications that will also have broad application in the food, environmental, and medical industries.

Cornell Connection
A faculty member of Cornell’s Department of Food Science cofounded Agave BioSystems. The company collaborates with other Cornell faculty and seeks to remain closely allied with the university to the mutual benefit of both.
Applied Pulsed Power Inc. (APP)

Applied Pulsed Power Inc. (APP) develops products for pulsed power applications. APP’s focus has been the development of high power solid-state switches to replace tube-type switches (ignitrons, thyratrons, and spark gaps) used in existing pulsed power applications. The company designs and builds high peak power pulse generators for research and commercial applications. APP also supplies pulsed ion beam equipment for a unique surface treatment system.

**Cornell Connection**
Members of Cornell’s faculty and staff founded Applied Pulsed Power, which employs several Cornell graduates.
For more than 25 years, ATC-NY has provided advanced R&D in computer security, information management, and reliable computing. ATC-NY’s research in computer security has resulted in prototype systems and products addressing the protection of sensitive information, the detection of system intrusions, and the analysis of system vulnerabilities. These areas of work include software protection, computer forensics, intrusion detection, wireless network security, vulnerability analysis, security architecture, and security policy analysis and design. ATC-NY’s contributions in information management include research and development in network-centric computing, workflow, information pedigree management, search and retrieval, and visualization. ATC-NY’s research in reliable computing encompasses design verification, implementation verification, model checking, and safety-critical systems. Recent projects include work in the area of network protocol analysis and synthesis of code that is correct by construction.

ATC-NY continues to lead the industry in innovative research and has developed several products that are being commercialized by two spin-off companies. ATC-NY has operated as a wholly owned subsidiary of Architecture Technology Corporation since 1999. ATC specializes in networking and distributed computing and is a privately held company.

**Cornell Connection**

ATC-NY works with the Cornell Computer Science NUPRL group. The company has ongoing collaborations with Cornell faculty in the Department of Computer Science and the School of Electrical and Computer Engineering. ATC-NY has teamed with Cornell on various research efforts.
Bigwood Systems Inc. (BSI) provides the utility industry with high-quality software solutions growing out of cutting-edge research and development work. BSI has an excellent track record of identifying and developing innovative technologies and applying them in a cost-effective fashion to solve critical problems facing the power industry and utility companies related to engineering analysis, design, maintenance, operations, and planning. At BSI all technology development is focused on solutions to the problems and needs of our customers and the utility industry. The company invented technologies and holds rights to six U.S. patents and has another three pending patent applications in this area of expertise.

Cornell Connection
A Cornell faculty member from the School of Electrical and Computer Engineering founded Bigwood Systems.
BinOptics Corporation

BinOptics Corporation is an optical component developer and manufacturer of photonic chips for optical transceivers. BinOptics plans to commercialize its revolutionary etched-facet laser technology, targeted at applications in the telecom and datacom markets, to reduce the cost of components for high-growth applications such as 10G Ethernet by over 80 percent, while significantly increasing performance and quality. The company’s monolithically integrated laser chips are manufactured using its proprietary etched-facet technology. BinOptics is privately held and funded by Silicon Valley venture firm Draper Fisher Jurvetson, the Cayuga Venture Fund, FA Technology Ventures, ArrowPath Venture Partners, and STIC International.

Cornell Connection

In collaboration with faculty from the School of Electrical and Computer Engineering, a Cornell Ph.D. graduate—the CEO of BinOptics—invented the founding technology involving semiconductors. BinOptics also holds exclusive licenses for Cornell technology.
BIOnexus Ltd.

BIOnexus® Ltd. develops, markets, and sells dietary supplements to the medical community, with an emphasis on the treatment of HIV patients. The company has established a reputation of strong scientific knowledge and integrity in the HIV medical community. The company’s first product, NutriVir™, was introduced in January 1998 followed by NutriVir-NSA in 2001. BIOnexus also engages in contract research and product development. Founders have received 15 U.S. patents relating to medical foods for diabetes, metabolic syndrome, and inflammation.

Cornell Connection
A former Cornell professor of pharmacology in the College of Veterinary Medicine and a Cornell advanced degree alumna cofounded BIOnexus.
The CBORD Group Inc.

The CBORD Group Inc. is a worldwide provider of food service and nutrition services, software, and systems for campuswide ID card programs, housing management, and cashless dining. CBORD is the dominant provider of cashless systems to the college, business, and healthcare markets, with more than 750 installed cashless systems and over 100 campus housing systems under current management. CBORD systems are used in colleges and universities, hospitals and nursing homes, business food services, correctional institutions, restaurants, grocery stores, theme parks, casinos, and even at the Olympic games. CBORD develops, markets, sells, installs, and supports its base of more than 6,000 clients from its headquarters in Ithaca. CBORD hosts an annual user group conference attracting more than 600 participants annually. The company’s information systems and services improve the operating performance and competitive advantage of its customers.

Cornell Connection

The company’s founder is an alumnus of Cornell’s College of Arts and Sciences and the Johnson Graduate School of Management. The CBORD Group grew out of a set of programs designed by the company’s founder while a graduate student working in Cornell Dining.
CEA Systems

The mission of CEA Systems is to develop to a commercial standard intellectual property held by the Cornell Research Foundation in the field of controlled environment agriculture (CEA) and deploy it for commercial application. CEA is a new paradigm in agriculture that leverages information technology to provide an ideal growth environment and means of communication for plants.

For many crops, CEA biomass production exceeds that of conventional agriculture by two orders of magnitude or more. CEA is a safe, secure production system, addressing concerns for traditional food safety and providing containment of genetically modified organisms (GMO). Bypassing the traditional limitations of soil and climate, CEA offers a significant opportunity to return agricultural production to New York. The company’s goal is to create a software-configurable, energy-efficient module, suitable for production of a range of conventional and GMO crops. CEA Systems also offers training in hydroponics, horticultural support, and contract research opportunities for customers.

Cornell Connection

CEA Systems is a joint venture with the Cornell Research Foundation. The company works cooperatively with the Department of Biological and Environmental Engineering and the Johnson Graduate School of Management. Faculty and staff in the College of Agriculture and Life Sciences invented the algorithm that underpins this patented technology. Founded by a Cornell graduate, CEA Systems has an exclusive license for a suite of intellectual property related to controlled environment agriculture.
Claritas Inc. is the preeminent source of accurate, up-to-date demographic data and target marketing research information related to consumer behavior, consumer spending, geodemographic segmentation, and business-to-business applications within any specific geographic market area in the United States. Claritas’ software, target marketing research, and customer and market analysis services are aimed at reducing the cost of customer acquisition and growing customer value.

Claritas is a Nielsen company. The Nielsen Company is an international marketing research, demographic, and market segmentation research information and media company, which includes ACNielsen, Nielsen Media Research, Spectra Marketing Systems, and Scarborough Research.

**Cornell Connection**

A Cornell graduate founded NPDC, which later became Claritas. The company’s staff also lectures for the Cornell Program in Real Estate and the Johnson Graduate School of Management on a regular basis.
Concept Systems Inc. (CSI) provides applied research and evaluation, strategic planning, and technological support aimed at improving public policy, private enterprise, and collaborative ventures. CSI’s goal is to engage organizations to develop common understanding, enable organizations to build consensus, and empower organizations to turn ideas into action. CSI specializes in applying the Concept System®, a software tool and unique methodology used to ensure a well-informed, group-oriented decision-making process. The Concept System approach takes the ideas of individuals and combines them in unique ways to understand how a group thinks about a certain topic, idea, or goal. The company’s clientele includes federal agencies, corporations, small companies, and organizations.

**Cornell Connection**

A Cornell faculty member of the Department of Policy Analysis and Management in the College of Human Ecology developed the software and cofounded the company. CSI provides software licenses to Cornell faculty and graduate students who wish to use the Concept System in their research. The company also explores postdoctoral opportunities for Cornell graduate students, giving them the chance to work with CSI and its clients to further student research.
Conceptual Reality Presentations Inc. (CRPInc) provides experienced consulting and production of imagery, animation, motion graphics, and visualization for sales presentations, scientific analysis, forensic investigations, government agencies, and high-tech businesses. The company’s specialty is the conceptualization and conversion of technical data into compelling visual images. Data of any size or complexity can be transformed into meaningful graphic imagery and animation for in-house analysis and for presentations to clients and customers. The company’s goal is to make complexity comprehensible.

CRPInc has produced numerous broadcast-quality animations, video presentations, and interactive graphics applications for clients such as KET (Kentucky Educational Television, a PBS affiliate), MeadWestvaco, USGS, IBM, A. W. Chesterton, BioSignia, Peter Vallas Agency, and the former MCI. The company creates 2-D and 3-D motion graphics and special effects as complete productions and in collaboration with other media producers.

**Cornell Connection**

CRPInc’s principals are Cornell graduates and longtime staff members. The company’s visual producer has 19 years of experience as a scientific visualization producer working with numerous Cornell researchers. For several years in the start-up phase, the company was a corporate partner of the former Cornell Theory Center, now Cornell’s Center for Advanced Computing.
Cummins Nursery

Contact
1408 Trumansburg Road  P: (607) 227-6147  [website]
Ithaca, NY 14850

4233 Glass Factory Bay  P: (315) 789-7083  jnc1@localnet.com
Geneva, NY 14456

Cummins Nursery is focused on the production of disease-resistant fruit trees from breeders at the Cornell Agricultural Experiment Station in Geneva, New York, and other institutions and the production of the new disease-resistant apple rootstocks developed by the Cornell-Geneva breeding team. The nursery also produces heirloom apple varieties; cherry trees, including the new self-fertile varieties from Cornell-Geneva; fire-blight resistant pears; and the newest varieties of plums.

Cornell Connection
The cofounder of the company (the owner’s father) was the apple rootstock breeder at the Cornell Agricultural Experiment Station in Geneva for 30 years and was part of the team that developed the Geneva series of resistant rootstocks. Cummins Nursery originally licensed the Geneva apple rootstock series. The owner maintains close contacts with Cornell faculty and research pomologists at Geneva.
Databound Solutions Inc. provides mainframe integration and data management applications to the healthcare and financial industries. Clients include several hospitals ranging from large university hospitals with nearly 1,000 doctors to community hospitals with only 50. The company specializes in managing large volumes of data and moving the data between systems to facilitate information sharing, which can help facilities improve financial benchmarks and make better management decisions.

**Cornell Connection**
In addition to utilizing incubator space in the Cornell Business and Technology Park, the company depends upon the technically educated workforce fostered by Cornell University.
Data Description Inc.

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Ithaca, NY 14850

P: (607) 257-1000
F: (607) 257-4146
E: sales@datadesk.com

www.datadesk.com

Data Description Inc. creates, sells, and supports effective data exploration and visualization solutions that help solve business, engineering, and scientific problems. The company also produces, sells, and supports content-rich multimedia-training products based on its MediaDX author and viewer technology. Data Description has been creating and selling innovative products for more than 20 years. The company will continue to grow its partnerships to develop specialized data analysis applications and high-quality multimedia courseware.

The company has recently focused its data analytics resources toward building predictive models for higher education and nonprofit fundraising organizations. The models help the organizations learn which alumni and donors are most likely to give to the institution. The multimedia courseware unit of the business has expanded into the medical education training course market.

Cornell Connection
The company’s CEO is a Cornell faculty member of the Department of Social Statistics in the School of Industrial and Labor Relations. The president graduated from the Johnson Graduate School of Management. Data Description hires Cornell graduates and has partnered with Cornell faculty on the development of multimedia courseware products.
databeast Inc.

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1668 Trumansburg Road       P: (607) 277-5808
Ithaca, NY 14850            www.databeast.com
                              E: bonze@databeast.com

Databeast Inc. provides dataComet-Secure, a secure terminal emulation product for the Macintosh OS X platform. Emulations include DEC VT100/VT220, PC- & SCO-ANSI, and IBM TN3270 with support for file transfer protocols. Databeast's clientele ranges from individuals to academic institutions, corporations, and government agencies.

Cornell Connection

The company's founder is a former Cornell staff member. Databeast provides Cornell with updated versions of dataComet-Secure for Macintosh computers distributed through Bear Access.
DatapointLabs

Founded in 1995 with a mission to test materials for CAE, DatapointLabs today is the premier materials testing company for the product design community. DatapointLabs has a specialized product line, TestPaks (www.testpaks.com), which allows CAE analysts to easily order material testing for the calibration of more than 100 different material models. Data are delivered in the form of complete electronic material models, ready to use in CAE. Serving a client base of over 600 companies, DatapointLabs tests more than 1,000 materials per year for physical properties of all types of materials, including metals, plastics, rubber, and foam.

Cornell Connection
Cornell alumni founded the company. DatapointLabs continues to work with Cornell researchers and scientists on long-term projects.
Digicomp Research Corporation

Digicomp Research Corporation is a software development organization that provides software contract services and develops software-intensive products for government and industry. Digicomp has extensive experience in applications that involve tracking and control of aircrafts. The company has worked in a variety of application areas, including simulation, control, radar data processing, mapping, and graphics display systems, with customers such as the Air National Guard, the U.S. Air Force, the Canadian Forces School of Aerospace Control Operations, Lockheed Martin, MacAulay-Brown Inc., and JCIET/JCIDEX.

Cornell Connection
Cornell engineering graduates founded the company, and Cornell faculty members serve as consultants to Digicomp.
DLtech Inc.

DLtech Inc. serves agriculture through leading-edge electrotechnology. The company provides engineered electrotechnology, research, and educational services that enable farmers to produce a better product, conserve energy, and improve profitability.

**Cornell Connection**
The company’s president is a retired faculty member in Cornell’s Department of Biological and Environmental Engineering.
DNANO represents DNA and nano: “We Bring DNA and Nanotechnology Together.” DNANO Systems LLC commercializes P-Gel, a new protein-production platform that uses hydrogel to produce proteins efficiently and economically. P-Gel can cut product costs by an estimated 20 times over conventional protein-producing techniques. P-Gel produces a wide range of high-yield, low-cost proteins, sidestepping the need for cells for pharmaceutical protein target and drug discovery. DNANO’s technology is based on a number of inventions from Cornell involving DNA amplification mediums and techniques.

**Cornell Connection**

A Cornell faculty member of the Department of Biological and Environmental Engineering in the College of Agriculture and Life Sciences invented the protein production platform that is the basis for P-Gel.
e2e Materials LLC

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Ithaca, NY 14850  E: pat@e2ematerials.com

e2e Materials LLC is a cleantech/greentech start-up that produces proprietary, strong, and biodegradable composites from annually renewable fibers and soy flour, an agricultural commodity. Based on technology developed over 15 years at Cornell University and exclusively licensed by e2e, the formulation of the material platform can be tuned to achieve properties ranging from corkboard to soft steels.

The company is commercializing a formaldehyde-free, cost-competitive alternative to particleboard and medium-density fiberboard (PB/MDF) for the office furniture industry. Formaldehyde, a carcinogen, is being legislated out of the $8 billion ($4.6 billion, domestic) PB/MDF market. In 2007, California passed legislation phasing out the use of urea formaldehyde in wood composites. e2e’s biocomposite contains no urea formaldehyde and no petroleum products. Like natural wood, it is biodegradable at the end of its life. In addition to its green attributes, e2e’s PB/MDF alternative adds additional value by reducing weight up to 66 percent. It is inherently flame retardant and has superior screw retention.

Cornell Connection

e2e Materials is a licensee of Cornell technology and sponsors ongoing research at the university. It is also the 2007 winner of the Johnson Graduate School of Management Business Idea competition. The Johnson School’s Big Red Ventures made investments in e2e Materials. A Cornell faculty member of the Department of Fiber Science and Apparel Design in the College of Human Ecology invented the technology.
Environmental Associates Ltd.

Environmental Associates Ltd. serves the drinking water and wastewater industries with testing and research on waterborne pathogens, including enteric viruses and parasites such as *Giardia* and *Cryptosporidium*. The testing is used in a wide variety of circumstances, from watershed monitoring to the development of new water treatment processes and devices. Since its inception, the company has been active in the development of improved testing methods. The company’s clientele has included the Environmental Protection Agency, the Florida Department of Environmental Protection, West Point Military Academy, and the University of Massachusetts.

**Cornell Connection**

Environmental Associates collaborates with Cornell University researchers through grants in biotechnology from Cornell’s Center for Advanced Technology (CAT) to develop innovative assays for pathogens of environmental concern. The Ithaca area and Cornell provide a unique location rich in resources, with a highly skilled labor force critical to the expansion and diversification of the company.
Etron Inc.

Contact
1410 Peruville Road  P: (607) 898-3553
Freeville, NY 13086  F: (607) 898-3533
E: etronet@yahoo.com

Etron Inc. develops, manufacturers, and markets microcomputer control systems for dairy farms. Etron’s control system is based on a Cornell invention for a variable-speed drive controller which optimizes vacuum level control in both milking and clean-in-place system washing phases. The apparatus significantly reduces electrical energy usage and cost.

Cornell Connection

A faculty member of Cornell’s Department of Biological and Environmental Engineering in the College of Agriculture and Life Sciences developed the enabling invention for Etron Inc.
Evaporated Metal Films Inc. (EMF) has provided more than 70 years of continuous technological advances in the area of thin film coatings. It is in its third generation of family leadership. The company provides thin film coatings for a wide range of optical, conductive, and decorative applications. The company’s capabilities include coating design, specification development, and prototype-to-production project management. EMF coats glass, metal, ceramic, and plastic substrates from 1 millimeter up to 2.3 meters. Customers are in industries such as aerospace, military, instrumentation, vision, lighting, and automotive.

**Cornell Connection**
As the result of a Cornell Ph.D. thesis in vacuum-deposited aluminum coatings, a Cornell alumnus founded the company. Evaporated Metal Films continues to pursue research interactions with Cornell.

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<td>239 Cherry Street</td>
<td>P: (800) 456-7070</td>
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Fingerlakes Aquaculture Inc. is a high-tech seafood production and processing company specializing in indoor recirculating aquaculture. The facility, with an area of approximately 40,000 square feet, has a production capacity of 1.25 million pounds of tilapia (*Oreochromis niloticus*) per year. Fingerlakes Aquaculture sells its entire tilapia product to the live market with the long-term goal of selling processed tilapia fillets into the mainstream U.S. whitefish market.

**Cornell Connection**

Fingerlakes Aquaculture utilizes technologies and techniques that were developed in the Cornell Aquaculture Program. Cornell faculty members from Biological and Environmental Engineering and Food Science invented the methods underlying Fingerlakes Aquaculture’s tilapia raising.
Fracture Analysis Consultants Inc. (FAC)

Fracture Analysis Consultants Inc. (FAC) provides computer-based failure analysis, product and process redesign, and life-prediction capabilities to the aerospace, turbomachinery, petrochemical, and automotive industries. The company has unique finite and boundary element–based software for simulating the initiation and propagation of cracks in metallic, concrete, rock, and composite structures. The company’s signature service is interactive consulting in which FAC works to educate engineering and management personnel in the underlying principles and use of the company’s software, while also assisting in the solution for the target problem. FAC is also developing commercial state-of-the-art simulation software for the U.S. Navy and Air Force and commercial airframe and engine manufacturers.

Cornell Connection
A Cornell faculty member of the School of Civil and Environmental Engineering and two former doctoral students founded the company. Research from Cornell continues to add to the company’s knowledge and experience. Cornell research also inspired commercial versions of the software.
Fusion Sourcing Group Inc.

Fusion Sourcing Group Inc. is a manufacturers’ representative serving the electronics industry in New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, and the District of Columbia. The company provides technical sales assistance and cost-effective solutions to engineering and purchasing at all stages of a product’s development. The mission of Fusion Sourcing Group is to provide value to the industry by combining the capabilities of the manufacturers represented with the needs of Fusion’s customers.

**Cornell Connection**

The vice president of business development, a company founder, is an alumnus of Cornell’s College of Arts and Sciences. The Fusion Sourcing Group looks forward to opportunities to work with the Entrepreneurship@Cornell program and utilize other Cornell resources.
Gene Network Sciences Inc. (GNS) is a biosimulation company that creates cell- and organ-level computer models able to simulate the clinical performance of drugs and drug candidates. GNS creates models in several therapeutic areas, including oncology and cardiovascular medicine and for safety and toxicity evaluation. By predicting how and why specific compounds impact human biology, GNS helps pharmaceutical companies improve clinical trial success rates and bring safer, more effective drugs to market.

GNS customers and collaborators include Novartis, Johnson & Johnson, Mary Crowley Medical Research Center, Cornell University, University of California at San Diego, Harvard Medical School, Brown University, and McGill University. The company has been awarded more than $7 million in grants from the National Institutes of Health, the National Institute of Standards and Technology, and the Department of Energy.

**Cornell Connection**

Gene Network Sciences was founded by two Cornell physics graduate students, aided by Cornell faculty and an alumnus. The company has a number of joint research projects with Cornell faculty from various departments. GNS also uses licensed Cornell technology. GNS was the first investment made by Big Red Ventures of the Johnson Graduate School of Management.
Genex Cooperative Inc.

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Service & Production Center  P: (607) 272-2011  www.crinet.com
522 Sheffield Road  E: info@crinet.com
Ithaca, NY 14850

Headquarters  P: (715) 526-2141
100 MBC Drive  F: (715) 526-3219
Shawano, WI 54166

Genex Cooperative Inc. supplies dairy and beef cattle genetics—semen and breeding service—to dairy and beef producers throughout the world. This member-owned farmer cooperative has 27,000 members and thousands of nonmember patrons. Genex is a subsidiary of Cooperative Resources International, a Wisconsin-based holding cooperative.

Cornell Connection
Genex works closely with the veterinarians of the Large Animal Clinic of Cornell’s College of Veterinary Medicine to monitor the health program and treat any health problems that occur within Genex’s herd. The company also works closely with the Animal Health Diagnostic Laboratory to monitor the health program and to complete a comprehensive series of health tests on Genex’s livestock.
GrammaTech Inc.

Contact
317 N. Aurora Street  P: (607) 273-7340  www.grammatech.com
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E: info@grammatech.com

GrammaTech Inc. develops and markets programming tools that increase programmer productivity and reduce errors. Commercial products include CodeSonar™, a C/C++ code analyzer that finds buffer overruns, null-pointer dereferences, and many other errors; CodeSurfer™, a software inspection tool for C/C++ and machine code; the Synthesizer Generator™, a CASE tool generator; and Ada-ASSURED™, a language-sensitive editor and coding standards enforcement tool for Ada programmers.

Cornell Connection
A Cornell Computer Science faculty and a former doctoral student founded the company.
H & I Agritech Inc.

H & I Agritech Inc. appraises, manages, and conducts basic and applied research in agriculture, biology, and ecological studies. The company strives to uncover new knowledge and skills that will profit agriculture and improve the well-being of all people. The discovery, development, and marketing of new products resulting from this knowledge is the vehicle for rewarding the company’s investors and for contributing to the economic development of the community and the welfare of the environment.

Cornell Connection

The company is a spin-off of Cornell research on biocompatible chemicals for controlling plant diseases and pests. The company’s president is a professor emeritus in the Department of Plant Pathology.
Hybrid Silica Technologies Inc. (HST)

Hybrid Silica Technologies Inc. (HST) commercializes C Dots, fluorescent nanoparticles that approximate the brightness and size of quantum dots without the toxicity. C Dots can be used in bioimaging and biosensing products, and there are plans to explore other potential applications such as use in displays, as drug delivery vehicles, and as additives for plastics, inks, and paints.

**Cornell Connection**

Hybrid Silica’s founding technology is based on a fluorescent nanoparticles platform that was developed at Cornell. A faculty member of the Department of Materials Science and Engineering and a Ph.D alumna developed the enabling invention. HST has exclusive access to the intellectual property held by Cornell for C Dots and other sol gel-based nanostructured hybrid materials.
HydroMath LLC

HydroMath LLC is an environmental and coastal consulting company. The company does modeling and computational analysis and also produces software.

**Cornell Connection**
Two Cornell faculty members of the School of Civil and Environmental Engineering founded the company.
Impact-Echo Instruments LLC manufactures and sells portable, computer-operated, impact-echo test systems for on-site testing and evaluation of concrete and masonry structures. Impact-echo is an acoustic, nondestructive test method for locating cracks, voids, and other flaws in plain, reinforced, and post-tension concrete and masonry structures, including bridges, highways, dams, buildings, and tunnels. It can also make accurate measurements of the thickness of concrete slabs, such as highway pavements, floors, and retaining walls.

**Cornell Connection**
A former Cornell faculty member of the School of Civil and Environmental Engineering invented and perfected the impact-echo method. The president of Impact-Echo Instruments is dean emeritus of Cornell’s College of Engineering and is the author of the software used with the test systems marketed by the company. The company has licensed Cornell technology and continues to collaborate with Cornell faculty.
INCODEMA Inc.

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407 Cliff Street
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F: (607) 277-5511
E: sales@incodema.com

INCODEMA Inc. manufactures accurate, detailed sheet metal prototypes and small production runs extremely rapidly using computer-aided stamping technology. The company’s CNC precision workstation, in combination with state-of-the-art CAD software, makes expensive and time-consuming tooling unnecessary. Miniature components are a specialty. INCODEMA also offers mechanical CAD and design services.

INCODEMA can produce prototypes in a wide range of materials, from carbon steel to plastics, incorporating operations such as contouring, embossing, and riveting. INCODEMA delivers quality and speed to its product development customers, including Borg Warner, Siemens, Motorola, and Eaton.

Cornell Connection
INCODEMA’s location and experience allow the company to pursue present and future opportunities to work with Cornell, both as a resource and a client. INCODEMA has completed several projects for the Laboratory of Elementary-Particle Physics (LEPP) and has various other projects in process, which will be used to further develop the synchrotron operations at Cornell.

INCODEMA has also worked extensively with the College of Engineering, the Department of Plasma Studies, and Cornell Local Roads Program. Projects range from single prototypes for research to pre-production phased work for government-funded programs. This includes similar collaboration with other Cornell projects.
Innovative Dynamics Inc. (IDI) is a technology development corporation with expertise in electronics, sensors, signal processing, lasers, and acoustics. IDI develops intelligent transportation systems for improved aircraft and ground vehicle safety, especially when operating in hazardous winter weather conditions. IDI’s vision is to convert the company’s innovative concepts to important commercial products with strategic partners and investors.

IDI has developed numerous innovative applications of its technology under contract from government customers through Small Business Innovative Research (SBIR) grants, state-sponsored research, and private companies. IDI invented a smart rubber deicing boot, an all-metal expulsive deicer boot (first to fly), a shape memory alloy deicer for helicopters (first to test), and pattern recognition software for finding mechanical defects and delaminations in structures. The company developed acoustic sensor technology for monitoring aircraft vibration and wiring failures, as well as for detecting contaminants in fluids and lubrication systems. IDI also developed a unique infrared camera that measures highway weather and road surface conditions for the Department of Transportation and is currently marketing the system to automobile manufacturers as a “smart headlight” that alerts the driver to dangerous road conditions ahead, such as ice, snow, and fog.

**Cornell Connection**
IDI’s proximity to Cornell provides opportunities to use Cornell as a resource.
Insights International Inc.

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Ithaca, NY 14851-6401 
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F: (607) 564-9566 
E: insights@electronranch.com

10 Park Avenue 
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P: (212) 213-0097

Insights International Inc. is a documentary and interactive media design company specializing in technology transfer, science education, engineering subjects, and children’s programming. Insights produces videotapes, builds websites, and produces video and audio for websites as well as for other delivery systems. All production services feature the current broadcast formats. Insights offers a full range of production services from design, scripting, and shooting to on-line editing and standards conversion and duplication.

The company’s clientele has included the National Gallery of Art; the Cornell University Colleges of Veterinary Medicine, Human Ecology, and Agriculture and Life Sciences; and Program for Workplace Systems. Insights’ two locations, Ithaca and New York City, allow the company to better serve the local and international needs of clients.

Cornell Connection
The company’s proximity to the university enables its staff to use Cornell as a resource, as well as to recruit the university as a client. The two principals of the company are Cornell science graduates. The original concepts for technology transfer resulted from the academic research of one of the company’s principals.
International Climbing Machines (ICM) has developed a technology to radically alter how elevated height work is performed. The company’s portable, remote-controlled devices can scale virtually any vertical or inverted surface, and because they are operated safely from the ground, humans are not exposed to dangerous heights or to dangerous chemical or toxic environs. ICM’s machines can climb walls, tanks, ships, building structures, dams, and towers.

Cornell Connection
ICM has worked with researchers in the Department of Materials Science and Engineering, received marketing consultations from Cornell’s BR Incubator through the Johnson Graduate School of Management, and hired a Cornell engineering intern for ICM’s team through Entrepreneurship@Cornell.
The International Food Network Inc. (IFN) serves the international food and beverage industry, including ingredient manufacturers and consumer products companies. The company is a comprehensive product development laboratory. Through the practical application of science and technology, this service-oriented company brings to the market innovative new foods, beverages, and ingredients and works to deliver the highest possible quality and value to clients. Services include concept and prototype development, process development and scale-up, commercialization, ingredient development and substitution, line extensions, product and process cost efficiencies, quality improvement, accelerated shelf-life testing, sensory testing and analysis, consumer testing, and naturalization.

In 2002 the company started a third subsidiary laboratory in Naples, Florida—International Food and Nutrition Research—which now has six employees. The company's new building in the Cornell Business and Technology Park, with more than 10,000 square feet of laboratory space, was recently expanded by an additional 1,000 square feet.

**Cornell Connection**

Many of IFN’s employees in the United States and England are Cornell graduates. The company utilizes the Department of Food Science research facility, the pilot plant, and library facilities on the Cornell campus and continues its research interactions with the university.
Ithaca Materials Research & Testing Inc. (IMR)

Contact
131 Woodsedge Drive
Lansing, NY 14882
E: imr@imrtest.com

Ithaca Materials Research & Testing Inc. (IMR) performs materials and product testing and failure analysis for a wide variety of industries. The company provides certification of metals, plastics, elastomers, coatings, circuitry, and complete products. IMR also manages product recalls and assists manufacturers in designing robust products less prone to failure. A secondary mission is the development of new products through technology transfer and industry partnerships. Clients include more than 1,000 manufacturers in aerospace, automotive, electronics, consumer products, medical devices, and retail. IMR’s services prevent serious injury due to defective products and protect manufacturers from losing millions of dollars due to poor materials selection.

IMR’s resources include 30,000 square feet of lab space in Ithaca, as well as facilities in Charleston, South Carolina; Louisville, Kentucky; and Portland, Oregon.

Cornell Connection
IMR’s CEO, a Cornell graduate, founded the company while doing consulting at Cornell and serves on the advisory board of the Cornell Center for Materials Research. IMR has performed research at the Cornell Nanofabrication Facility and works with the university’s Entrepreneurship and Personal Enterprise Program. Several principal technical staff members are Cornell graduates.
KensaGroup LLC

KensaGroup LLC is an intellectual property (IP) development business dedicated to commercializing promising university-owned scientific discoveries in the fields of chemistry, biochemistry, chemical engineering, and computational modeling. KensaGroup’s focus is on new technologies that meet a demand posed by looming economic or regulatory issues. KensaGroup’s objective is to recognize novel technologies that may be developed from basic research. KensaGroup then provides the necessary scientific, professional, and financial bridges that lead from initial discovery to successful product development. The company has launched eight companies in the past seven years.

Cornell Connection
KensaGroup was founded by a faculty member of the Department of Chemistry and Chemical Biology and a Cornell graduate. The company originated with research performed in the chemistry department, which was licensed exclusively from the Cornell Research Foundation.
Kerry Bio-Science

Kerry Bio-Science is a leading global manufacturer of media components for the pharmaceutical, biotechnology, and fermentation industries. Products, including an extensive line of monohydrate and anhydrous forms of pharmaceutical grade lactose and a line of refined and technical grade hydrolyzed proteins that include non-animal derived peptones, are marketed for use in cell culture, fermentation, and diagnostic media, as well as yeast autolysates and extracts to ensure optimal performance in the growth of a broad range of industrially significant microorganisms.

The company’s research is aimed towards the pharmaceutical and food industries. Kerry Bio-Science is a subsidiary of Kerry Group, an international food ingredients, consumer foods, and flavors company based in Ireland. The company’s primary manufacturing facility is in Norwich, New York.

Cornell Connection

The Kerry Center for Cell Culture Technology’s manager is an alumnus of Cornell, with undergraduate and graduate degrees from the university. The cell culture applications scientist was a postdoc at Cornell.
Kionix Inc.

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www.kionix.com

Kionix Inc. is a global leader in the design and manufacturing of high-performance, silicon-micromachined MEMS (microelectromechanical systems) inertial sensors. The company’s products enable a variety of applications in the consumer electronics, industrial, health care, and automotive markets, including motion-based gaming, user-interface functionality in mobile handsets, inertial navigation and dead reckoning, and hard disk drive drop protection in mobile products. Kionix’s world-class 40,000-square-foot facility enables the company to meet the needs of high-volume, high-yield MEMS manufacturing.

Cornell Connection
A former Cornell engineering faculty developed Kionix’s founding technology. Kionix’s motion sensors are based on more than 30 Cornell technologies that involve MEMS and motion sensing. Kionix has an exclusive license to the technology from the Cornell Research Foundation. The company’s founders received their doctoral degrees from the College of Engineering, and two members of Kionix’s board of directors are Cornellians. Several employees are also Cornell graduates.
Laminare Technologies Inc. develops innovative, small-scale (<10 watts) fuel cell technologies for portable electronic devices. The company is currently focused on research and development, with initial revenue derived from sublicensing to small, niche-market original equipment manufacturers its PM2™ (planar microfluidic, membrane-less fuel cell) and DualYTE™ technology (dual electrolytic chemistry—alkaline fuel/acidic oxidant).

The Cornell-based research and management team will transition to sales and marketing as salable units are introduced to core portable electronic device markets over the course of the next two to three years. Long-term revenues will be based on the sale of Forever Battery™ devices to consumer and industrial electronics manufacturers. The company plans to commercialize these and other cutting-edge platforms based on intellectual property developed at the Cornell Fuel Cell Institute and become an industry leader in fuel cell power solutions for portable electronic devices.

**Cornell Connection**

A Cornell team including faculty in the Department of Chemistry and Chemical Biology, the School of Chemical and Biomolecular Engineering, the former director for the Center for Sustainable Global Enterprise, and the associate director of the Cornell Fuel Cell Institute founded and manages the company.
Life Network Engineering Technologies Inc. (LifeNET)

Contact
210 Eddy Street P: (607) 275-9360 www.life-net.info
Ithaca, NY 14850-4614 F: (415) 962-0510
                                           E: tph3@cornell.edu

Life Network Engineering Technologies Inc. (LifeNET) uses internet technology to solve critical, persistent, and pernicious problems in our human environment, beginning with the identification, prevention, and treatment of child abuse and neglect. Target markets include health and medicine, human services, law enforcement, and education. LifeNET is the only worldwide provider of 100 percent internet-based resources in the field of child abuse and neglect. It is a global leader in knowledge acceleration in the medical aspects of child abuse.

More than 300,000 people in 165 countries use LifeNET’s child abuse prevention resources. Private membership subscription services, internet development contracts, and corporate sponsorships and endorsements provide the revenue of the corporation.

Cornell Connection
LifeNET has collaborated with Cornell’s internationally respected Family Life Development Center (FLDC) in the creation and support of early efforts at child abuse prevention on the internet. FLDC continues to be a key partner and member of LifeNET’s Child Abuse Prevention Network. Cornell is a major resource to LifeNET for collaborative research and development.
Matereality LLC

Contact
Langmuir Laboratory  P: (607) 257-1784  www.matereality.com
Box 1017  F: (607) 266-0168
95 Brown Road  E: info@matereality.com
Suite 102
Ithaca, NY 14850-1294

Matereality’s material data management (MDM) and database hosting technology allow materials scientists, engineers, and product design teams to securely store any kind of material properties on a web-based platform in TrueDigital™ format. Data are always there, never lost. Data sets can be selectively shared with authorized users in keeping with the business needs of data owners. Companies can create powerful, selectively visible databases for the use of their internal users, prospects, and clients. The Matereality user base includes major players in the automotive, appliance, Tier One, material supplier, medical devices, and consumer products verticals. It is a solution created with the awareness and agility to adapt to product lifecycle management needs of clients worldwide, from Fortune 500 enterprises to small businesses, as virtual private database (VPD) evolves.

Cornell Connection
Cornell alumni founded the company.
MCCI

MCCI is the leading independent software vendor for USB drivers and firmware cell phones. MCCI staff helped to develop the USB specifications and chair the USB-IF device working group and communication device class committee. A privately held Delaware corporation, MCCI has headquarters in Ithaca, New York, and sales and engineering offices worldwide.

Cornell Connection
MCCI’s vice president of operations and several members of the engineering, marketing, project management, and quality teams are Cornell alumni. The company’s CEO has participated with Cornell in international and regional meetings.
Mezmeriz uses carbon fiber MEMS (microelectromechanical system) technology developed at Cornell to make a high-definition projector that is the size of a matchbook. The company is building a prototype of the Mezmeriz technology, which will ultimately lead to a projection system that can be embedded into any mobile device, including phones and video players.

Mezmeriz offers an updated MEMS, replacing traditional silicon lattices with carbon fiber. The company’s MEMS produces a vibrating resonance engine that has the benefits of silicon manufacturing, but with the strength advantages of carbon fiber.

**Cornell Connection**

A faculty member of the College of Engineering and a graduate student from the College of Human Ecology invented the various MEMS-based technologies that are used in displays. The CEO and cofounder of the company is a Cornell alumnus.
Micro Beef Technologies Inc.

The Ithaca laboratory and office—Animal Ultrasound Services (AUS)—works as a subsidiary of the Texas-based Micro Beef Technologies Inc. to develop and supply complete systems for the computerized evaluation of ultrasonic images of live animals and carcasses. AUSKey® image analysis software is the key component of both AVT® (animal value technology) and CVT® (carcass value technology) systems. Livestock producers and pork and beef processing plants around the world use AUS systems.

Cornell Connection

AUSKey is based on image analysis software that was developed at Cornell. A professor emeritus of Cornell’s Department of Animal Science created the founding licensed software.
MicroBios Inc.

MicroBios Inc. is a biotechnology company with research labs in Ithaca, New York, that specializes in research and development of microbial-based technologies to promote human and animal health and healthful agricultural production. MicroBios’ products decrease pathogenic bacteria in animals, increase the feed efficiency of production livestock, and ultimately decrease the carbon, nitrogen, and phosphorous footprint of animal agriculture.

**Cornell Connection**

One of the company’s founders has a Ph.D from Cornell. Most previous employees have received Ph.Ds or were postdocs at Cornell. MicroBios interacts with the Cornell community on a frequent basis.
MiTeGen LLC

MiTeGen LLC develops, manufactures, and distributes microfabricated tools for crystalization and molecular structure determination of proteins, viruses, and pharmaceutical compounds and for manipulation and measurement of small, fragile samples. MiTeGen sells direct and via distributors to academic and government laboratories and to pharmaceutical companies in more than 25 countries.

Cornell Connection

A faculty member and graduate students in Cornell’s Department of Physics developed MiTeGen’s founding technologies. MiTeGen makes extensive use of the Cornell NanoScale Science and Technology Facility (CNF) and the Cornell High Energy Synchrotron Source (CHESS) in developing its products.
Moldflow Corporation

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Moldflow Corporation, the established brand name in the software industry for plastics, has been acquired by Autodesk Inc. The world leader in 2-D and 3-D design software for the manufacturing, building, construction, and media and entertainment markets, Autodesk sees plastics and composites as some of the fastest-growing engineering materials. Moldflow provides software solutions that enhance the design, analysis, and manufacture of injection-molded plastic parts.

Companies in the automotive, consumer goods, electronics, and medical industries are among those that use Moldflow solutions to address part and mold design optimization issues, as well as to maximize productivity and profitability on the manufacturing floor. Headquartered in Framingham, Massachusetts, Moldflow has offices and R&D centers in the United States, Europe, Australia, and the Asia-Pacific region.

Cornell Connection
Moldflow acquired C-MOLD in April 2000. C-MOLD, established in Ithaca in 1986, licensed technology developed at the Cornell Injection Molding Program (CIMP), which applies scientific principles to the plastic injection molding process. Moldflow also hires Cornell graduates.
Multiwire Laboratories Ltd.

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Multiwire Laboratories Ltd. develops and manufactures products for rapid x-ray orientation of single crystals by the back-reflection Laue method. Industrial and academic laboratories utilize the real-time x-ray detector, motorized orientation stages, and computer analysis of back-reflection images to characterize or determine the orientation of the lattice planes in a variety of crystal materials, such as silicon, gallium arsenide, calcium fluoride, sapphire, geological minerals, and turbine blades. The newly released NorthStar 6.0 analysis program features automated indexing of Laue patterns for the first time.

Cornell Connection
The company’s COO developed the original technology at Cornell.
Nature Source Genetics (NSG) is a computational genomics company dedicated to the development and application of new algorithms designed to harness natural genetic variation in the improvement of crop plants. NSG scientists interact with a team of distinguished faculty from Cornell and other major research institutions on problems related to quantitative genetics, including optimization of population structure and design, quantitative trait loci (QTL) detection and validation, and QTL deployment in commercial breeding programs.

In addition to the computational headquarters in Ithaca, NSG has access to experimental field test sites around the world. NSG clients are international seed companies. Using natural genetic diversity together with new computer algorithms creates improved, healthier, environmentally friendly crop plants for the world.

**Cornell Connection**

The company’s founders and scientific advisory board include faculty of Cornell. One of NSG’s contracts licenses technology developed at Cornell.
North Sea Resins (NSR)

North Sea Resins (NSR) develops and manufactures light-activated resins for use as a rapid leak repair tool for industrial and commercial facilities. NSR resins are cured in 30 seconds by visible blue light, saving considerable time and money. Light-activated resins are designed to cure in any location or condition. Products such as the Field Repair Kit and Rapid Repair Kit are marketed to clients including ACE Hardware, Sumco, NYSEG, the U.S. Navy, Johns Hopkins University, and Cornell University.

Cornell Connection
Cornell is an NSR client. The company’s proximity to the university is beneficial.
Novomer develops two types of “green,” biodegradable polymers that are less polluting than traditional plastics. The first is made using carbon dioxide, and the second is made using carbon monoxide. Novomer’s method uses catalysts developed at Cornell and other universities to develop polymers whose feedstocks contain between 30 and 50 percent carbon monoxide and carbon dioxide. In comparison, most plastics are produced using 100 percent petroleum products as their primary ingredient.

Cornell Connection

Novomer was founded on novel catalytic technologies developed by a faculty member of the Department of Chemistry and Chemical Biology. In addition, the company’s president and two of the three founders are Cornell alumni.
Nuance Communications Inc.

Nuance Communications Inc. is the global leader in speech technologies and services. The company develops speech recognition, text-to-speech, and speaker verification software for network and embedded applications, including multimodal devices with both an audio interface and visual display. Customers include Garmin, Motorola, Amtrak, United Airlines, Verizon, Microsoft, Ford, and Daimler-Chrysler.

The Ithaca group creates custom speech solutions for industries, such as automakers and mobile hardware manufacturers, and develops text-to-speech software, including RealSpeak and ETI-Eloquence. RealSpeak and ETI-Eloquence are used in a wide variety of applications, including over-the-phone unified messaging, voice portals, navigation readers in vehicles, and screen readers for blind computer users.

**Cornell Connection**
Local Nuance staff are Cornell alumni.
Nutrimed Biotech

Based on the company’s expertise in lipid materials for biomedicine and nutrition, Nutrimed Biotech has developed and patented novel platforms for drug delivery, novel research tools for cellular and nuclear signaling, and derived diagnostics and HTS drug discovery screens.

Nutrimed’s patented drug delivery technologies include novel systems of molecular canopies for controlled and targeted delivery of small molecule and polymeric drugs. These systems are applied for delivery of cytotoxics, bioactive peptides and proteins, and therapeutic nucleotides and genes. Related technologies create non-immunogenic cell surfaces useful in novel blood substitutes and biocompatible surfaces for implants.

Nutrimed’s patented research tools are based on cellular signaling via phosphoinositide-specific phospholipase, kinase, and phosphatase enzyme families. These tools include novel phosphoinositide reagents for diagnostics and high throughput drug discovery screens in cancer, diabetes, and inflammation.

Cornell Connection
The founder of the company is a former visiting professor of biochemistry at Cornell. Nutrimed Biotech conducts collaborative research with the university and retains Cornell faculty members as consultants.
Ongweoweh Corp.

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Ongweoweh is a national provider of pallet management service to Fortune 500 companies. The company focuses on reducing material handling and product waste by utilizing our software and computer design expertise.

Cornell Connection
The company’s founder and president is a founder of Cornell’s American Indian Program and continues to work closely with the program, as well as offering a full scholarship for American Indians. The company also provides internships for Cornell students.
OptiGen LLC

OptiGen® LLC is a private genetic service company that provides testing for certain inherited diseases to owners of purebred dogs, breeders, and their veterinarians. The company’s core tests detect carrier and affected status for various inherited eye diseases, for example, seven types of progressive retinal atrophy and night blindness. The company’s goal is to implement tests for additional types of inherited diseases in multiple dog breeds. The company has achieved growth and stability with an increase in the number of tests performed and with the cultivation of an international market.

Cornell Connection

The initial testing services of OptiGen were based upon the discoveries made by faculty members of Cornell’s Baker Institute of Animal Health. The company’s core tests for eye diseases in purebred dogs were developed at Cornell. The company uses licensed Cornell technology and continues to pursue research interactions with the university.
Palisade Corporation

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Palisade Corporation is the maker of the world’s leading risk and decision analysis software. The DecisionTools® Suite provides an array of products for making better decisions by the numbers, including PrecisionTree®, RISKOptimizer™, TopRank®, and @RISK, a Monte Carlo simulation add-in for Microsoft Excel providing advanced uncertainty and risk modeling. Additionally, Palisade’s StatTools provides 36 wide-ranging statistical procedures, five built-in data utilities, and custom analysis, while NeuralTools® “learns” existing data to make predictions, both numeric and categorical, from new data. Palisade’s mass spectrometry division develops reference databases and software for mass spectrometry data systems.

Cornell Connection
Palisade works closely with faculty in Cornell’s Department of Chemistry and Chemical Biology in developing mass spectrometry programs. The company has provided risk and decision analysis software and training to students in the Johnson Graduate School of Management and the School of Hotel Administration. Palisade has also partnered with the School of Operations Research and Industrial Engineering on graduate research projects.
PhotoSynthesis Productions LLC

PhotoSynthesis Productions LLC offers complete film, video, DVD, and motion graphic production services. The company’s client list includes the National Geographic Society, national PBS-TV, Cornell University, and Ithaca-area businesses. PhotoSynthesis productions are supported by the National Science Foundation, the Ford Foundation, MetLife, and others. The company offers a wide range of delivery options, including television broadcast, online streaming, and direct distribution to homes and classrooms worldwide.

Cornell Connection
The company was founded by two Cornell graduates and has close ties with many Cornell faculty and staff members who have been resources as well as clients.
Porous Materials Inc. (PMI)

Porous Materials Inc. (PMI) designs and manufactures instruments for pore structure characterization of materials. The company also provides contract testing and consulting services.

Cornell Connection
PMI’s president, a Cornell alumnus, founded the company.
Prendismo is an e-learning company with services delivered over the internet to computers and mobile devices. The company offers a premier video clip collection on entrepreneurship, business, and leadership, providing wisdom from the experience of entrepreneurs and other business leaders and experts. Prendismo brings relevant business knowledge and advice to small- and medium-sized businesses and provides a personalized web workspace centered around the eClips collection of more than 12,000 clips. Entrepreneurs and business leaders can generate, organize, and develop ideas while learning through the experience of other professionals.

**Cornell Connection**

The company’s eClips collection was created by a faculty member and staff of Cornell’s Department of Applied Economics and Management and Cornell’s Mann Library.
Primet Precision Materials Inc. manufactures a wide variety of materials at the nanoscale for solar and fuel cells, environmental cleanup, improved catalysts, and other applications. Benefits to society include more efficient power sources and a cleaner environment.

**Cornell Connection**
Primet and Cornell collaborate on nano materials research, development, and commercialization. Primet technology accelerates Cornell research and enables commercialization of Cornell technology. Primet is currently working with Cornell faculty to develop and commercialize novel Cornell catalysts for fuel cells.
Re-Markable Paint Company LLC

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Re-Markable Paint Company LLC produces a paint and paint remover system that allows managers of natural turf grass fields to paint lines on athletic field surfaces and completely remove the paint at their convenience with a removal solution. The eco-friendly, temporary Re-Markable Paint is primarily used for boundary lines, infield baselines, and logos, but this technology is also ideal for the large customer base that requires a flexible field management tool.

Cornell Connection
Re-Markable Paint’s products are based on research at Cornell that focuses on polymers and surface coatings. The technology underlying Re-Markable paint was created by a faculty member of Cornell’s Department of Horticulture and a former faculty member of the Department of Chemistry and Chemical Biology.
RP Solutions Inc.

RP Solutions Inc. develops remittance processing software that scans payment documents, including checks and invoices, and fully automates payment processing. Customers of RP Solutions include banks that perform payment processing services for their clients, county governments that collect taxes, and other organizations that process incoming payments such as insurance agencies, utility companies, retail operations, and collection agencies. The company also applies the same imaging technology to the processing of deposits at ATMs.

RP Solutions bundles its software products with select hardware platforms to provide an integrated solution. The company offers services ranging from custom design and programming to on-site implementation, staff training, and support services for customers across the country. RP Solutions is built on strong core values and is committed to the care and success of each of its employees and customers.

Cornell Connection
The company’s president is a Cornell alumnus.
Rumsey-Loomis is a privately owned company dedicated to engineering, research, and development. Concepts are developed in the virtual world with three-dimensional, textured, real-to-life visualization, frequently with animation and camera motion. What results is a video with a realistic rendering of the product before it is actually built. Computer simulations save time and money. The company also serves the industry in low- to mid-volume reworks/screw machine and CNC lathe and mill prototypes.

**Cornell Connection**

The company co-invented a DNA prep device with a faculty member of the Department of Horticultural Sciences at Cornell’s Geneva campus. Rumsey-Loomis also aided in building the first genetic acceleration devices.
Scientists at Sacyl Scientific Inc. have discovered a novel target for the treatment of infectious disease. Manipulation of the target by application of small molecules can block a pathogen’s ability to sense environmental conditions that induce its switch to virulent states. This promises a new method for treating infectious diseases, as selective compounds can render pathogens innocuous to their host. The company is developing compounds and protocols for commercial applications of the principle with the intention of licensing successful results to pharmaceutical and related companies.

**Cornell Connection**

The scientists and directors of Sacyl who discovered this treatment method are Cornell faculty. The company’s president is a Cornell alumnus.
Smith Marketing Services LLC (SMS)

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Smith Marketing Services LLC (SMS) works with business-to-business companies to identify and evaluate new product opportunities, launch new products, and support direct and distributor sales. SMS employs world-class marketing professionals in market research, interactive media, database mining, marketing, advertising, public relations, and direct selling. SMS offers powerful creative solutions to achieve specific marketing objectives. Clients include Mettler-Toledo Hi-Speed, New York Air Brake, New York State Electric & Gas, and Steuben Glass.

Cornell Connection
SMS’s proximity to Cornell and past and present working relationships enable the company to regard the university as both a resource and a client. The president of SMS has guest lectured at Cornell’s Johnson Graduate School of Management, and the vice president of creative services is an alumna of the College of Architecture, Art, and Planning.
Tech S2 Inc.

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Tech S2 Inc. is a privately held technology company that specializes in database application, software products, and customized software solutions.

ISSIS™ (Integrated Social Services Information System) is a fully customized, highly available, and scalable integrated case management solution that supports human service agencies’ data management needs. ISSIS allows county human services departments to operate more efficiently and cost effectively and to better serve families, individuals, and children.

CaseScribe is an on-demand, hosted, automated transcription solution. It automatically transcribes dictated voice notes using state-of-the-art voice recognition technology and securely makes the transcription available in minutes on a desktop PC or via a web portal.

Cornell Connection
Tech S2 has a number of clients at Cornell currently using CaseScribe. The company also recruits employees and interns from Cornell.
Tetragenetics Inc. is an early-stage biotechnology company meeting the needs of customers who seek a cost-effective alternative platform technology for the production of genetically engineered proteins. The company harnesses the unique biology of *Tetrahymena thermophila*. Tetragenetics’ technology is particularly well suited to the production of eucaryotic membrane and secretory proteins that are difficult to express in conventional systems. Such proteins include vaccine antigens, monoclonal antibodies, and a variety of therapeutic proteins for the treatment and prevention of human and animal disease.

Development of recombinant subunit vaccines against human pathogens is under way, and eventually they may be used for large-scale expression of genetically engineered monoclonal antibodies. Tetragenetics is also actively pursuing an internal pipeline of hard-to-make proteins and monoclonal antibodies, in partnership with a number of biopharmaceutical companies.

**Cornell Connection**

A Cornell faculty member of the Department of Microbiology and Immunology in the College of Veterinary Medicine founded the company.
Transonic Systems Inc. manufactures ultrasonic and laser Doppler blood flowmeters for medical research, intraoperative surgical use, and clinical patient monitoring. The blood flowmeters are used with perivascular sensors during patient surgery, in acute and chronic animal studies, and with sterile tubing (clamp-on) sensors during medical procedures such as cardiac bypass and hemodialysis.

The company’s transit-time flowmetry, developed at Cornell, is now the gold standard for animal research and intraoperative heart surgery use. Transonic Systems’ ultrasound indicator dilution flowmeter has revolutionized hemodialysis access patency management.

**Cornell Connection**

Transonic Systems is a spin-off from research conducted by the company’s president while a senior research associate in the Department of Physiology at Cornell’s College of Veterinary Medicine. Transonic Systems and Cornell continue an active collaboration on research and development projects involving blood flow, pressure sensing, and nanofabrication technologies. Cornell continues to be an important proving ground for the company’s new measurement technologies. Transonic Systems also uses Cornell’s nanofabrication facilities for development of new flowmetering devices.
Vector Magnetics LLC

Vector Magnetics LLC specializes in providing services and instruments for the directional drilling industry. The most important applications are for drilling relief wells, which are the last resort; controlling oil field fires; drilling to produce coal bed methane; and horizontal drilling of pipelines under river channels and other obstacles. The company has made drilling relief wells for emergency control a viable option. Vector Magnetics has also made possible drilling of steam-assisted gravity drainage wells and pipeline pilot boreholes with underground end-to-end connection. Vector Magnetics’ clients include major oil companies, directional drilling companies, gas producers, and pipeline drilling companies.

Cornell Connection

Vector Magnetics’ technology is based on research conducted at Cornell by the company’s founder, who is a professor emeritus in the School of Applied and Engineering Physics.
Veratag LLC

Veratag’s mission is to provide absolute security in radio frequency identification (RFID) and other electronic security applications. Veratag’s innovation is MEMflakes™, micro-electromechanical systems (MEMS) resonators that produce unique analog signals for identification, authentication, and counterfeit prevention. MEMflakes will be used in highly secure RFID applications such as secure access, identification documents, financial transactions, and anticounterfeiting.

Cornell Connection

Basic research that led to the intellectual property licensed by Veratag was developed in a research group in the Department of Applied and Engineering Physics, and a member of the research group cofounded the company. Veratag has manufactured MEMflakes at the Cornell NanoScale Science and Technology Facility (CNF).
Vet-Aire Inc.

Vet-Aire Inc. is dedicated to providing its customers with high-quality products that solve breathing problems in racehorses and other equine athletes. Vet-Aire is the premier supplier of a line of devices designed to provide solutions for horses that suffer from upper respiratory breathing problems during strenuous activity. The technology behind the lead product reflects years of study and research on upper respiratory problems (wind soundness) in horses at the Cornell University Equine Performance Testing Clinic in the College of Veterinary Medicine.

The company has developed two models of the throat support device (TSD). Unlike treatments involving surgery, the TSD provides a noninvasive and convenient means of detecting if the horse suffers from certain upper airway problems and preventing occurrence of the problem. It is a humane alternative to the use of tongue-ties in horses, a procedure that is uncomfortable to the animal.

Cornell Connection

Two faculty members of large animal surgery at the Cornell’s College of Veterinary Medicine founded the company.
VMETRO

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VMETRO is the premier provider of products for high-speed embedded sensor I/O processing and data recording. These products are sold worldwide and used in signal processing intensive applications like radar, sonar processing, digital software radio, spectrum analysis, telecommunications base stations, and medical imaging. In addition to servicing this high-performance embedded computing market, VMETRO also provides state-of-the-art bus analysis tools.

In October 2008, Curtiss-Wright Controls Inc. acquired VMETRO and its subsidiaries.

Cornell Connection
VMETRO has collaborated with Cornell in a variety of areas, including education and research.
Vybion Inc.

Vybion Inc. develops human monoclonal antibody drugs for large markets with significant unmet medical needs. The company’s proprietary technologies dramatically increase throughput and reduce time-to-market.

Cornell Connection

Vybion has licensed several patents developed by a Cornell faculty member of the School of Chemical and Biomolecular Engineering that form the basis for ProCode, the company’s proteomics technology platform. The company’s founder, chairman, and CEO serves on the Cornell University Life Sciences advisory board and the College of Agriculture and Life Sciences advisory council.
Widetronix Semiconductors Inc. has developed a revolutionary materials solution for silicon carbide (SiC) wafers that significantly improves the manufacturability of reliable, lightweight, and highly efficient transistors and diodes. The company is taking advantage of this materials platform to drive commercialization of a family of low-voltage microbatteries for nanowatt to microwatt applications. This low-voltage microbattery, also called a betavoltaic battery, combines a single-layer SiC diode with an implanted junction, a cap coated with a beta isotope, and a standard semiconductor package.

The result is a safe, long-life battery capable of nanowatts to microwatts of power up to two volts. Configurations for the technology include a stand-alone, long-life battery or a low-voltage trickle charger for lithium ion batteries. Market entry is focused on anti-tamper applications in the defense sector with growth in the implantable biomedical device markets (for example, cardiac and neurological implants), with nearly $4B in market potential.

**Cornell Connection**

Widetronix’s SiC growth technology is based on key research conducted at Cornell. A Cornell faculty member of the School of Electrical and Computer Engineering and a Johnson Graduate School of Management alumnus founded the company.
Novomer Inc.
Novomer develops "green" biodegradable polymers.

Frank DiMeo
CEA develops controlled environment agriculture systems for commercial application.
Kionix Inc.

Kionix's KXTE9 accelerometer has embedded algorithms for orientation and activity monitoring and reduces operating power consumption to the world’s lowest levels at 30µA, all in a 3x3x0.9mm package.
AppleBoost develops and markets products with dried apple peel powder for more health benefits.
The Transonic flowprobe represents a quantum leap for cerebral/vascular neurosurgery.

David J. Langer, M.D.
Roosevelt Hospital, New York City

Transonic Systems’ blood flowmeter, based on CU-developed flowmetry and manufactured in Ithaca, New York, quantitates blood flow in cardiac, transplant, and neurosurgeries throughout the world.
Companies Outside Tompkins County, Within New York State

Small Business Development

CCTEC Denotes current license(s) for Cornell technology through CCTEC
AMEREQ Inc. is a commercial development consulting and marketing company that specializes in horticultural products. Its products are safe, nontoxic, environmentally friendly, and responsive to today’s environmental concerns. AMEREQ is the exclusive licensed producer and marketer of Cornell’s Urban Tree Planting Mix, and the company develops and markets superabsorbent hydrogels and controlled-release fertilizers. AMEREQ developed and introduced synthetic hydrogels into forestry and horticulture markets. AMEREQ developed a network of more than 70 producers of CU-Soil™ in the United States and Canada.

**Cornell Connection**
AMEREQ Inc. holds an exclusive license for Cornell technology. The company works closely with a Cornell faculty member of the Department of Horticulture, who also directs Cornell’s Urban Horticulture Institute.
AppleBoost Products Inc.

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The average American eats one apple every five or six days, not enough to provide health benefits. Compared to apple flesh, apple skins contain two to six times more dietary phytochemicals, which can act as disease-fighting antioxidants. AppleBoost Products Inc. develops and markets products that incorporate dried apple peel powder. The company sells a 270-count bottle of capsules and a line of specialty certified organic applesauce tubes (32- and 64-gram tubes) offered in two flavors: wildberry and peach mango. Each athlete of the summer 2008 U.S. Olympic Team was provided with a supply of AppleBoost's applesauce tubes as part of the in-flight fare.

Cornell Connection

AppleBoost licensed the technology developed by a Cornell faculty member of the Department of Food Science upon which the company was founded. The association with the College of Agriculture and Life Sciences continues as the company refines and improves the product.
Agricultural Modeling and Training Systems LLC (AMTS)

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Agricultural Modeling and Training Systems LLC (AMTS) develops next-generation agricultural software and information systems. The company is the result of more than 20 years of research at Cornell and 44 years of Cornell experience applied to developing a unique approach to nutritional and environmental modeling and record keeping in the global animal industry. The company’s software tools assist in making dairy and meat production efficient, reducing negative environmental impacts, and helping producers to comply with reporting and record keeping for environmental regulations. AMTS provides training and support for the tools, as well as training in biological principles behind the models, and offers advanced nutritional and farm management training worldwide. AMTS also offers customized software applications and training for businesses.

Cornell Connection
The three AMTS founders are a former Cornell faculty member, a staff member, and a Ph.D. graduate of the Department of Animal Science. The company is a spin-off from Cornell’s ruminant nutrition modeling group and uses licensed Cornell technology.
BioWorks Inc.

The vision of BioWorks Inc. is to create a safer environment. The company provides environmentally responsible, safe, and cost-effective solutions for the horticulture and specialty agriculture industries.

Other products in addition to those listed are RootShield Home & Garden, MilStop® Broad Spectrum Foliar Fungicide, CEASE®, and NemaShield®.

Cornell Connection

BioWorks’ founding inventions were created by a member of Cornell’s faculty of Horticultural Sciences at Cornell’s Geneva campus. BioWorks has a license from the Cornell Research Foundation for the company’s primary products.
A member of the faculty of Weill Cornell Medical College developed the first series of monoclonal antibodies against prostate specific membrane antigen (PSMA) that were capable of binding to living cells. PSMA is a unique and exceptional target present on the cell membrane of all prostate cancer cells and in the blood vessel cells of all solid tumors, but not normal blood vessels. The lead antibody has been humanized, and 11 clinical trials involving 300 patients have been completed at five academic medical centers. The intellectual property has been licensed to BZL Biologics Inc., which is developing the antibodies for diagnostic imaging and therapy for a variety of cancers.

**Cornell Connection**

Cornell has granted the company an exclusive worldwide license for the antibody technology.
CherryPharm Inc. is a science-based company committed to pursuing and leveraging academic research on the natural health benefits of tart cherries into great-tasting and clinically proven juices. The company’s innovative juice extraction and pouring technique have been designed to protect the naturally potent but fragile cherry compounds. CherryPharm all-natural tart cherry juice has been clinically tested at world-renowned hospitals and universities and is the first intervention ever—pharmaceutical or otherwise—shown to reduce post-exercise muscle damage, inflammation, and oxidative stress in humans and shown to improve sleep in individuals with insomnia. An additional Cornell study performed by Norm Ducharme at the College of Veterinary Medicine has shown a first-of-kind protective effect against post-exercise muscle damage in thoroughbred horses.

**The Cornell Connection**
CherryPharm all-natural tart cherry juice was developed in conjunction with a faculty member in the Department of Food Science and Technology at Cornell’s Geneva campus. A faculty member from the Department of Clinical Sciences at the College of Veterinary Medicine has also conducted further studies on the product. CherryPharm Inc. employs several Cornell graduates and maintains its headquarters and manufacturing facility at the Cornell Agriculture and Food Technology Park.
### CharmAnalysis™

CharmAnalysis™ is DATU Inc.’s technology. It is a proprietary gas chromatography-olfactometry (GCO) system that measures the odor activity of chemicals. Chromatograms can be produced from extracts of foods, and both quantitative and qualitative descriptions of the chemical components that cause smell can be generated.

### Cornell Connection

CharmAnalysis was developed in the Food Science Laboratory at the Cornell Agricultural Experiment Station in Geneva, New York, which is part of Cornell's College of Agriculture and Life Sciences. The company’s principals are employees or former employees of Cornell. For 10 years DATU licensed technology from the Cornell Research Foundation.
DMV International

DMV International is a global supply partner with more than 30 years of experience in protein separation and hydrolysis technologies and in supplying bioactive health, specialty nutrition, and dietary ingredients to the human and microbial nutrition industries.

DMV utilizes innovative technology to create consistent, high-quality, value-added ingredients. The company specializes in the manufacture of protein hydrolysates from any protein source, using sophisticated enzymatic and acid hydrolysis, state-of-the-art extraction and separation methods, and spray drying. Speciality proteins, peptones, and bioactive peptides designed for health benefits are ingredients produced by DMV.

The company focuses on functional, nutraceutical, enteral, clinical, health, and sports nutrition systems, as well as systems for microbiological analyses and fermentation and cell culture media. DMV has developed hypoallergenic proteins for infant formula and bioactive peptides for immunity and heart health.

**Cornell Connection**
DMV uses Cornell as a resource to support development of new protein hydrolysates. The company also uses pilot lab and process equipment in the Department of Food Science.
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Ecovation Inc. provides superior management of organic waste streams. The company uses its patented Mobilized Film Technology™ (MFT) as the cornerstone of customized flexible solutions for clients’ waste treatment needs. The MFT process converts organic waste streams to renewable energy. It is applicable to food processing, winery, brewery, distillery, and ethanol industries. The company provides total solution delivery, which includes designing, building, and operating all components necessary for successful, economical wastewater treatment.

Cornell Connection
The former CEO, former president, vice president for business development, and many board members are Cornell alumni. One of the company’s founders is also a former staff member of Cornell’s Department of Biological and Environmental Engineering. Ecovation’s technology was initially based on research conducted at Cornell.
The mission of ELIA Life Technology Inc. is to provide independence through simple innovation and to become the leading assistive technology provider to the visually impaired. ELIA Life Technology’s product, aimed at the visually impaired, is an alternative tactile alphabet for the blind and the assistive technology with which to use the alphabet. Through the company’s product, ELIA Life Technology offers greater independence for the visually impaired resulting in higher employment rates, lower health care costs, and an improved quality of life.

**Cornell Connection**

The company is working in collaboration with a faculty member in Cornell’s School of Mechanical and Aerospace Engineering and Computer Science Department to develop innovative tactile printing technologies.
Genencor, a Danisco Division

Genencor, a division of Danisco, is a leading industrial biotechnology company that develops innovative enzymes and bioproducts to improve the performance and reduce the environmental impact of the cleaning, textiles, fuels, and chemicals industries.

Since 1982, Genencor has grown into one of the world’s leading biotechnology companies. Genencor operates bioproducts manufacturing sites around the globe. Corporate and R&D headquarters are located in Palo Alto, California, while business and manufacturing headquarters are in Rochester, New York. European business and R&D offices are centered in Leiden, the Netherlands.

Cornell Connection
Genencor has collaborated with Cornell scientists on projects such as the ice nucleation product, Snowmax Snow Inducer™, and a developmental agribiotechnology product. Genencor also collaborates and maintains connections with Cornell faculty on various biofuels technology projects.
Innovative Biotechnologies International Inc. (IBI)

Innovative Biotechnologies International Inc. (IBI) licensed a series of complementary technologies from Cornell that have been integrated into a biosensor with applications in multiple fields of use, including human and veterinary diagnostics, environmental testing, and civil and national defense applications, such as detection of bio-warfare agents, gene detection, and forensics. The company has worked with third-party companies to demonstrate feasibility in these applications and has successfully sublicensed the technologies for commercialization.

Cornell Connection

IBI has licensed a series of Cornell technologies through the Cornell Research Foundation. In several research programs established through Cornell’s Office of Sponsored Programs, IBI and Cornell scientists are working together to demonstrate the commercial feasibility of Cornell technologies to potential licensees. IBI plans to increase its technology portfolio by identifying and licensing additional Cornell technologies with the goal of demonstrating commercial feasibility and ultimately sublicensing the technologies to corporations that dominate their respective marketplaces.
The Jigalin Cheese Company Inc. converts and flavors varieties of cheese. The company, doing business as Colosse Cheese Store, is a wholesale and retail distributor of cheese and dairy products.

**Cornell Connection**
The company’s president consults with Cornell’s Department of Food Science.
Jodange provides a web-based service called Top of Mind™ that synthesizes the exploding volume of digital information and tracks it over time. The company’s natural language processing engine determines the opinion holder, the topic, and the sentiment (positive, neutral, or negative) for each online opinion, allowing users to search for opinions along any of these dimensions.

**Cornell Connection**

Much of the technology developed by Jodange was leveraged from research on sentiment analytics done at Cornell. A faculty member of Cornell’s Department of Computer Science is a cofounder of the company and serves as chief scientific officer. Jodange maintains a close relationship with Cornell and employs Cornell alumni and current students as interns.
Investments in Early and Seed-Stage Technology Companies

Lux Capital Management

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New York, NY 10017

Lux Capital Management is a research-driven investment firm focused on early and seed-stage investing in advanced materials, physical, and life sciences. Lux sources preliminary and seed-stage investment opportunities from renowned scientists at some of the most prestigious government labs and research universities in the world. The Lux team has started more than 20 companies and actively seeks to help entrepreneurs build successful businesses.

Through strategic entities in research, media, and politics, Lux maintains exclusive insight into key industry trends, a proprietary platform of knowledge and visibility, and unparalleled access to corporate decision makers and government policy makers.

Cornell Connection
Lux was cofounded by a graduate of Cornell’s College of Agriculture and Life Sciences, and one of the company’s associate is a graduate of the College of Engineering and the Johnson Graduate School of Management. They maintain connections to Cornell research.
Medeor Inc.

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Medeor Inc. develops d-methadone, a novel nonopioid analgesic. The company was created to fund clinical trials of the Weill Cornell Medical College-developed compound and then seek a sublicensee to manufacture, distribute, and market the product.

Cornell Connection
The company holds a Cornell license for Weill Cornell Medical College technology.
NeuwGhent Technology (NGT) develops and manufactures specialized electronic sensors and instrumentation for bioenvironmental monitoring. NGT’s initial product is the BEM family of sensors for in situ monitoring of oxygen, moisture, and temperature in high-solid, organic biodegradation processes. BEM solutions have applications in municipal and industrial solid waste processing facilities. They provide a robust, real-time means of monitoring constituents without the need for external sampling. The instrumentation provides single-user response or networked interconnection for multinode monitoring environments.

Cornell Connection
NGT responded to a request from Cornell’s Department of Biological and Environmental Engineering for robust, reliable, in situ sensor technology for biodegradation monitoring, which was lacking in the marketplace. The company developed the technology and manufactured prototype systems for Cornell’s use.
Reed’s Seeds

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Reed’s Seeds develops hybrid cabbage varieties for wholesale and retail sales. The company uses both traditional breeding and biotechnology methods.

Cornell Connection
The company’s owner is a Cornell graduate. Reed’s Seeds has worked with Cornell researchers on Cornell’s Ithaca and Geneva campuses for more than 50 years.
Stony Brook Cookie Company

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Stony Brook Cookie Company is an online artisan cookie bakery specializing in gourmet gift boxes baked to order. To support local producers and vendors and maximize freshness, the aim is to incorporate local ingredients whenever possible. The company recently relocated from Boston to Ontario County, adjacent to Cornell University’s New York State Agricultural Experiment Station and Food Venture Center. This proximity offers the company a unique opportunity to collaborate with Cornell staff and faculty in developing new products that make the most of what the agricultural community has to offer, including local dairy products and locally milled flour made with wheat grown 20 miles from the bakery.

**Cornell Connection**

The two founders of the company are Cornell alumni of the School of Hotel Administration and the College of Arts and Sciences. A 10-year reunion trip to Ithaca inspired the couple to relocate their business to the Finger Lakes region. The company has plans to collaborate with staff at Cornell’s Food Venture Center to enhance its product line and quality.
Terrenew LLC

Terrenew LLC manufactures low-cost environmental products and methods for cleaning up environmental contaminants. OilMaster and MetalMaster emerged from concepts of the physical and chemical structure of various agricultural waste products, including composts and plant and animal wastes.

Cornell Connection

Two faculty members of the Department of Horticultural Sciences at Cornell’s Geneva campus invented the company’s founding method. OilMaster 7x is the first of an extensive line of products developed through research at Cornell for the removal of spilled oil or other liquid contaminants from solid surfaces and from water.
Top Quality Hay Processors

Top Quality Hay Processors offers high-quality alfalfa and Timothy hay that has consistent low moisture levels, high levels of protein, high levels of fiber, consistency in flakes, and superb color and is mold and dust free. Because the cut hay is taken immediately from the field to the drying facility, where it is dried to a predetermined moisture content within a few hours of being cut, it is a higher quality product. This step bypasses the conventional procedure of letting the hay dry in the field for four to five days, where it deteriorates because of the sun’s ultraviolet rays, dew, and unpredictable rain. Use of a drying facility also prevents the typical damage to the hay from being turned several times to allow for thorough drying, and when dry, raked into windrows in preparation for baling by machine.

The product is a superior form of feed for animals, whether equine, dairy, goat, sheep, rabbit, or gerbil. Because Top Quality Hay Processors takes the weather factor out of the equation, customers are able to count on delivery, without the risk normally attributed to poor weather conditions.

**Cornell Connection**

The proximity to Cornell is a tremendous benefit to the company, which has utilized Cornell as a resource on a continuous basis.
The mission of Triad Technologies Inc. is to develop proprietary bioremediation system designs for the industrial sector for locally capturing and controlling HAPs and VOCs. The company’s systems consist of collection and bioremediation modules that are integrated into production furniture, such as worktables, cabinets, and wall units.

Cornell Connection
Cornell’s microbiology laboratory provided the inoculate isolation, environmental conditions, and systems performance evaluation for the remediation of specific industrial HAPs and VOCs. Continual research interactions with Cornell are important to the company’s success.
Vitis Biosciences Inc. has developed a novel biotechnology platform that provides solutions to virus diseases affecting premium vineyards worldwide, particularly in California and Europe. The company’s first product is a rootstock that is resistant to grape fanleaf virus (GFLV). Vitis Biosciences new rootstock product is an effective treatment for vineyards infected with GFLV.

**Cornell Connection**

The company licensed Cornell intellectual property and has a research contract collaboration.
ZedX Inc. builds technologies and advance knowledge systems to ensure abundant, secure food and energy supplies and a healthy environment, the foundations of sustainability.

AgFleet® guides the management of more than 12 million acres of agricultural land in North America. This powerful decision-support system was designed in consultation with growers, dealers, and other professionals to meet precision agriculture needs. The AgFleet modular, web-based applications manage information on everything from soil characteristics and irrigation to fertilizer and pesticide application. AgFleet facilitates the use of current and forecast meteorological information to guide planting and harvesting decisions, anticipate pest infestations, and analyze the economic results of different management options.

ZedX focuses on advance warning of weather events and changes in climate that may affect agricultural systems or energy or water supplies. Advance notice and risk reduction are critical to minimizing agricultural and other losses and adverse economic impacts. ZedX also develops a variety of other information technology products for a wide range of clients in the public and private sectors, domestically and internationally.

Cornell Connection
The company collaborates with Cornell as a member of the Cornell Agriculture and Food Technology Park in Geneva. The company’s founder and president and its CEO are graduate degree alumni of Cornell.
MCCI has developed software for more than 500 million cell phones and other mobile devices. MCCI has offices in Tokyo, Taipei, Seoul, and Austin, but the corporate headquarters is a renovated farmhouse in the heart of the Town of Ithaca.
Companies Beyond New York State

Small Business Development

These companies licensed Cornell technology through CCTEC.
ArcScan Inc. makes Artemis, a very high frequency (VHF) **ultrasound eye scanner**. Following an eye scan, signal analysis is performed on a PC-compatible microcomputer, and the data are available for immediate viewing on an LCD monitor. ArcScan merged with Ultralink LLC in September 2007. Artemis is enabled by a suite of licensed Cornell technologies that addresses corneal measurement, scanning, and imaging. Faculty members of the Weill Cornell Medical College invented the technologies.
Avera Pharmaceuticals Inc., a neuropharmaceutical licensing and development company, focuses on the acquisition, development, and commercialization of novel pharmaceutical compounds for the treatment of major neurological and psychiatric disorders. Avera is developing a pipeline of drug candidates to treat irritable bowel syndrome, overactive bladder, cognitive impairment associated with schizophrenia, and dementia, as well as a neuromuscular blocking agent for both rapid and routine endotracheal intubation and skeletal muscle relaxation during surgery. The first drug candidate, AV965, is in Phase I trials; the second, AV608, is in Phase II; and the third, Gantacurium, is in Phase III. The founding neuromuscular blocking (NMB) drug compound was jointly developed by a faculty member of Weill Cornell Medical College and GlaxoSmithKline.
CoAxia Inc. is developing a medical device for acute stroke. The concept involves increasing blood flow to the brain to minimize the damage of the stroke. CoAxia’s NeuroFlo™ catheter is a dual balloon catheter inserted in the patient’s abdominal aorta, which diverts blood flow from the lower part of the body to the brain. The company plans to demonstrate the safety and efficacy of its NeuroFlo catheter in FDA-approved clinical studies and ultimately make it a widely available treatment option for stroke patients. The founding technology for the NeuroFlo catheter was invented by a former faculty member of Weill Cornell Medical College.
Eden Bioscience Corporation provides natural plant health care products for the home gardener. The company helps growers produce better crops more efficiently and with a greater degree of safety. The products are based on a family of naturally occurring proteins called harpins and represent a unique plant protection tool—a plant health regulator. Products containing harpin stimulate a natural plant reaction that activates the internal plant processes, controlling disease and stress resistance, growth, and reproduction. Harpin products have no direct effect on pests and pathogens, but they send a message to the plant to activate its own growth and defense systems to protect itself. Plant Health Care Inc. acquired Eden in February 2007, including the license for the harpin protein technology from Cornell. Plant Health Care Group is a leading provider of naturally-based products for agriculture, commercial landscaping, and land reclamation industries.
GenVec Inc. (GNVC), a biopharmaceutical company, develops innovative therapeutics to treat cancer and other diseases. GenVec’s lead product, TNFerade™, is currently in a pivotal clinical study in locally advanced pancreatic cancer. Additional clinical trials are in progress in rectal cancer, head and neck cancer, and melanoma. GenVec also uses its proprietary adenovector technology to develop vaccines for infectious diseases including HIV, malaria, foot-and-mouth disease, respiratory syncytial virus (RSV), HSV-2, and influenza. GenVec utilizes over 20 Cornell technologies and methods involving gene therapy in its therapeutic products innovated by faculty members of Weill Cornell Medical College.
HµREL develops bioanalytic devices that are used in pharmaceutical development and industrial and consumer product safety testing. A HµREL® is a microfluidic circuit that models real-time protein binding, metabolism, and extraction in the liver. They can reveal interactions among multiple tissue types and one or more pharmacologic compounds. HµRELs have the potential to provide drug companies with data early in the preclinical phase so they can “fail early” in vitro and make corrections before they go into animal studies. The company estimates that HµRELs can save one-eighth of the cost of bringing a drug to market (drug companies spend roughly $800 million on average to gain FDA approval). A faculty member of Cornell’s Department of Biomedical Engineering developed the HµREL.
intElect Medical Inc. develops and commercializes **neurostimulation systems** for improving the recovery of brain injury patients. The company is developing proprietary deep brain stimulation (DBS) therapies and technology to improve the outcome of patients with traumatic brain injury. Two percent of the U.S. population suffers from traumatic brain injury, and each year, 1.4 million new Americans sustain a traumatic brain injury. intElect’s deep brain stimulation therapy has been initially proposed for the treatment of patients who are in a minimally conscious state or have chronic severe cognitive disability. IntElect recently received series B financing for $7 million from Boston Scientific Corporation and Greatbatch Inc. The company’s methodology is based on methods, developed by a faculty member of Weill Cornell Medical College, for using precise electrical pulses to improve neurological and cognitive function and coordination of function.
MediVas LLC pioneered a unique drug and biologic delivery system through the use of a new family of biodegradable polymers. The company’s platform technology is based on a next generation set of polymers exclusively licensed from Cornell University. This group of polymers offers a novel approach to drug delivery. They are fully biodegradable, biocompatible, and bioabsorbable; non-inflammatory; safe and efficacious; and degrade by surface erosion, allowing greater control over the rate and duration of release of their therapeutic payload. Products are across a wide range of therapeutic areas.
Metabolon Inc. is a diagnostics and services company offering the industry’s leading biochemical profiling platform. Metabolon’s patented platform provides a global analysis of complex biological samples for the discovery of markers and pathways associated with drug action and disease. This metabolomics-driven approach enables the identification of biomarkers useful for the development of a wide range of diagnostics and provides insight into complex biochemical processes, such as drug action, toxicology, and bioprocess optimization. A member of the Weill Cornell Medical College faculty helped to develop the methodology that shaped Metabolon’s metabolomic experiments.
Nano Surfaces Inc. (NSI) develops specialty polymer coatings to combat marine biofouling, bacterial biofilms, and biocorrosion. These products constitute a next generation of nontoxic coatings that are formulated to replace the current lineup of toxin releasing materials.

The company licenses Cornell technology and benefits from ongoing research activities with a faculty member of Cornell’s Department of Materials Science and Engineering.
Nanonics Imaging Ltd. develops products that open the new world of integrated near-field, far-field, and scanned-probe microscopy to scientists and technologists throughout the world. The products have won several awards and have generated wide customer interest. The company holds exclusive rights from Cornell University and the Hebrew University of Jerusalem to the central patents in the field of near-field optics and associated subjects in the development of its products.
New Objective Inc. develops innovations in high-sensitivity LC-MS research. The company is an industry leader in nanospray technology for mass spectrometry. The company, founded by a Cornell graduate alumnus and a faculty member of the Department of Chemistry and Chemical Biology, licensed Cornell technology.
Orbitek Inc. (formerly Biodiesel Technologies) is an alternative fuel manufacturing company with proprietary biodiesel processing technology that has significant cost advantages over existing biodiesel processing methods and offers very high yields and efficiencies. The technology offers the combined advantages of being proprietary and scalable, while being offered in a skid mounted unit that offers plug-and-play advantages. The potential for utilizing locally available feedstocks that can lead to new economic growth and greater energy self-sufficiency makes Orbitek’s technology of great interest outside of the United States. Orbitek developed its technology jointly with Cornell University’s School of Chemical and Biomolecular Engineering and holds a joint patent with Cornell on the core technology. Since the technology development, the company has successfully demonstrated the scale-up of the technology from a bench scale to a commercial unit that can annually produce millions of gallons of biodiesel meeting existing standards.
Pacific Biosciences Inc. (PacBio)  Founded: 2002

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Pacific Biosciences Inc. (PacBio), formerly Nanofluidics Inc., was founded as a spin-off from the Cornell Nanobiotechnology Center. PacBio is a start-up biotechnology company developing a transformative single-molecule, real-time (SMRT™) DNA sequencing platform. PacBio’s goal is to commercialize SMRT DNA sequencing technology, eventually enabling sequencing of individual genomes as part of routine medical care. PacBio’s SMRT technology offers a completely new performance envelope, with long reads, increased throughput, and low cost. This combination of performance characteristics is enabled by a unique approach that uses a single DNA polymerase working in a continuous process to synthesize DNA. For the first time, natural DNA synthesis by a DNA polymerase can be observed as it occurs. A Cornell faculty member and a Ph.D. graduate of Cornell’s School of Applied and Engineering Physics founded the company.
Phytex LLC is a joint venture of Protein Scientific, a nutraceutical biotechnology company, and JBS United, a major service-feed manufacturer. Phytex produces enzymes for the animal feed market that go into OptiPhos®, a feed product for livestock. OptiPhos is based on phytase, an enzyme that releases three times more phosphorus from feed grain in poultry and nearly two times more in pigs. Optiphos offers an enhanced diet for animals, since inorganic phosphate is replaced by energy that can be metabolized. Optiphos also creates substantially less phosphorus in the animals’ waste. OptiPhos is based on a phytase gene that was developed at Cornell University by faculty members of the Department of Animal Science and Department of Horticultural Sciences.
Q Therapeutics Inc. develops neural stem cell-based therapeutic products for debilitating diseases of the central nervous system (CNS). Q Therapeutics is developing natural cell-based products that regenerate insulating myelin on damaged neurons with the goal of restoring normal neuron function. The company’s first product, Q-Cells®, are glial progenitor cells and their progeny purified from various tissue sources. Q-Cells address a wide range of diseases, including multiple sclerosis (MS), transverse myelitis, cerebral palsy, spinal cord injury, and certain types of stroke. Stem cell discoveries covering certain cells of the central nervous system—made by a Weill Cornell Medical College faculty member—have contributed to Q Therapeutics’ broad patent portfolio.
RF Micro Devices Inc. (RFMD) is a global leader in the design and manufacture of high-performance semiconductor components. RFMD’s products enable worldwide mobility, provide enhanced connectivity, and support advanced functionality in the cellular handset, wireless infrastructure, wireless local area network, CATV/broadband, and aerospace and defense markets. RFMD is recognized for its diverse portfolio of semiconductor technologies and systems expertise and is a preferred supplier to the world’s leading mobile device, customer premises, and communications equipment providers. RFMD holds a license for Cornell technology.
RoseStreet Labs transforms **R&D ideas into viable high-volume products**. The company was founded with the vision to improve the quality of life through innovation. Since its founding, RoseStreet Labs has ventured into the semiconductor, renewable energy, and life sciences markets with strategic investments, intellectual property development, joint ventures, and a personal health technology spin-off. The company’s products include high-efficiency photovoltaic cells, ultrasonic near-field communications, diagnostics sensors, and microfluidics. RoseStreet Labs has a strategic relationship with Cornell and holds an exclusive license from Cornell for semiconductor devices.
SightSpeed Inc. is the first free IP-based video communications solution that really works. The company’s mission is to bring easy-to-use visual and voice communications to consumers and small businesses around the world, providing the highest quality, most feature-rich, hassle-free internet video for users. SightSpeed is easy to install and a breeze to use. SightSpeed delivers full motion, 30 frames per second video perfectly synched with audio and works great with ordinary computers and broadband connections, such as DSL or cable. The company’s revolutionary technology is patented and based on more than seven years of research led by a faculty member of the School of Electrical and Computer Engineering at Cornell. The company was founded by the faculty member and two Cornell graduate students.
Stealth Peptides International Inc. manufactures a family of small synthetic peptides rationally designed to protect the mitochondria for cardiovascular and neurodegenerative indications. The company holds licenses for seven inventions of the Weill Cornell Medical College. These inventions include peptides that inhibit mitochondrial permeability transmission, a peptide inhibitor of CD 36 expression, peptides for treatment of oxidative stress, a method for preventing acute renal injury, medicinal uses of mu-opioid receptor agonists, and a screen for antiviral drugs targeting hepatitis C and related viruses.
Modern academic researchers have a unique opportunity to facilitate the transfer of exciting research ideas to commercial viability. Beyond facilitating links between academics and private enterprise, the research commercialization process also creates novel employment opportunities in new markets and expands awareness of such opportunities to industry. Today’s start-up companies bring unique opportunities to many people in many walks of life.

Jack Henion  
Cofounder/Chief Scientific Officer and Chairman  
Advion BioSciences Inc.
Appendix
Cornell’s Research Serves the Region and Beyond: Small Business Development includes 126 companies:

Tompkins County
› 82 of the companies are located in Tompkins County
› More than 1,700 people are employed in Tompkins County by the companies
› 18 companies in Tompkins County report revenue totaling more than $7.1B*
› 33 companies are located in the Cornell Business and Technology Park

New York State
› 106 companies are located in New York State, including Tompkins County, and employ approximately 2,200 people
› 19 New York State companies, including Tompkins County companies, report revenue totaling more than $7.2B*
› 6 companies are located in the Agriculture and Food Technology Park in Geneva, New York
› 10 companies are spin-offs from Weill Cornell Medical College

Beyond New York State
› 20 companies are located beyond New York State
› All companies outside of New York State hold Cornell licenses

* Most companies do not submit revenue information.