INNOVATIONS
ECONOMIC DEVELOPMENT
TECHNOLOGIES
ENTREPRENEURSHIP
PUBLIC GOOD
NEW BUSINESSES
PARTNERSHIPS
INDUSTRY

CCTEC CORNELL CENTER FOR TECHNOLOGY ENTERPRISE AND COMMERCIALIZATION

2012 ANNUAL REPORT

The mission of CCTEC is to partner with industry to develop Cornell technologies into products and services for the public good, leverage Cornell's intellectual property to promote entrepreneurial opportunities and regional economic development, and provide technology transfer services to Cornell faculty and researchers.

A MESSAGE FROM THE VICE PROVOST & EXECUTIVE DIRECTOR

As CCTEC continued to build on its growing portfolio of new technologies and licenses in FY 2012, CCTEC received from Cornell researchers a new record high of 390 disclosures of Cornell technologies. It represents the fourth consecutive year of over 300 new disclosures received by CCTEC a year (see P. 16) – a rewarding fruition of CCTEC's continuing outreach efforts (see P. 10 to 13). CCTEC also executed the highest ever number of technology management agreements at 658, of which, 181 – another historical high – were commercial licenses issued to industrial partners for the commercial use and development of Cornell technologies (see P. 14). To promote the development of our national and regional technology-based economies, CCTEC issued more than 94% of these commercial licenses to partners in the US and more than 41% to partners in New York state (see P. 15).

CCTEC received a new record high of 390 disclosures. It represents the fourth consecutive year of over 300 new disclosures a year – a rewarding fruition of CCTEC's continuing outreach efforts.

Some of the "seeds" that were strategically sown by CCTEC earlier have also begun to "sprout" the desired results in FY 2012. A bioactive small peptide discovered at Weill Cornell Medical College was licensed in 2006 as the basis for the formation of a new business. It has successfully been tested in Phase I clinical studies in humans. The company has begun to enroll patients for Phase II clinical studies. Along the way, the company has raised and spent tens of millions of dollars to date. The process is illustrative of the long and winding road a company must take to develop a ground-breaking university discovery into therapeutic products for human healthcare. GeneWeave Biosciences, a Cornell startup founded in 2009, similarly has raised and received $12 million in new venture funding to advance its medical diagnostic business. SafetyStratus, a Cornell startup founded in 2011 to develop and provide web-based environmental health and safety management tools, introduced its first commercial product - LabcliQ™ to the market. Another Cornell startup founded in 2007, e2e Materials, has begun the development of a manufacturing facility for its "green products" in upstate New York that will create new job opportunities for the region (see P. 5). These are selected examples from our vast portfolio of licenses that illustrate the diverse and challenging roads our industry partners in different sectors took to make results of Cornell research useful to society. I want to take this opportunity to thank all the hard-working entrepreneurs and Cornell researchers for their devotion, teamwork, and perseverance in developing Cornell technologies to serve the public in fulfillment of Cornell's land-grant mission.

I hope this annual report provides you a meaningful snap-shot on the progress of the Cornell Technology Transfer Program.

As always, I welcome your input and suggestions.

Respectfully,

Alan Paau, MBA, PhD, CLP
Vice Provost & Executive Director

NEW BUSINESSES

NOHMs Technologies, Inc.
Ithaca, NY
www.nohms.com
NOHMs Technologies, Inc., is a battery materials developer and manufacturer with a mission to improve and commercialize promising new nanoscale chemistry for better batteries. NOHMs platform materials offer flexibility, light weight, long life, low price, improved safety, and zero toxicity. NOHMs Technologies is based on inventions made by Professor Lynden Archer of Chemical & Biomolecular Engineering.

Prolias Technologies, Inc.
New York, NY
www.proliastechnologies.com
Prolias Technologies, Inc., is a new business founded on the licensing of three Cornell technologies to reincarnate a dormant business. The new Prolias, led by serial entrepreneur, Joe Hernandez, serves the diagnostic industry by providing products and services to better determine the malignancy of thyroid tumors and the likelihood of transplant rejection.

Alcyone Lifesciences, Inc.
Ayer, MA
www.alcyonels.com
Alcyone Lifesciences, Inc., develops products that enable treatment modalities for difficult neuropathological conditions. The company is developing a micro-catheter platform that uses a propriety microfluidic design for delivery of drug/active molecules to the central nervous system. Alcyone is based on licensed Cornell technology, invented by Professor William Olbricht of Chemical & Biomolecular Engineering.

Optofluidics, Inc.
Philadelphia, PA
www.optofluidicscorp.com
Optofluidics, Inc., is developing microfluidic and biophotonic technologies for single molecule analysis and point of care medical diagnostics. Their initial products include the "Molecular NanoTweezer", which is a protein discovery tool that can handle the smallest forms of matter and the "Molecular Medic", which detects changes in blood-borne biomarkers to diagnose late phase hemorrhagic shock and traumatic brain injury. The company is based on technology invented by Professor David Erickson of Mechanical & Aerospace Engineering.

Telescope Time, Inc.
Washington, CT
www.slooh.com
Telescope Time, Inc., also known as Slooh, provides on-line sharing of space photos and partners with Google Sky to map the universe and co-promote live astronomy.

Boa-Bag LLC
New York, NY
Boa-Bag LLC is developing an improved laparoscopic tissue removal bag invented by Christopher Towe during his surgical residency at Weill Cornell Medical Center. Laparoscopic surgery is a minimally invasive surgical technique, in which surgery is performed through several small incisions. Laparoscopic surgery often requires the use of tissue removal bags. Large pieces of tissue, however, tend to bunch at the bottom of tissue removal bags. This poses a logistical problem during removal through the small incision typical of this technique, which impedes extraction and significantly prolongs the procedure. The Boa-Bag is designed to constrict the tissue and prevent bunching to facilitate the tissue removal process.

Seraph Robotics, Inc.
Ithaca, NY
www.seraphrobotics.com
Seraph Robotics, Inc., is a personal robotics company born out of the Fab@Home project in the laboratory of Professor Hod Lipson of Mechanical & Aerospace Engineering. Their product, Seraph ONE™, is a 3-D printer that uses simple software to generate 3-D printed products such as human organs and food items. The image and specifications for the desired printed products can be downloaded from the Internet and communicated to the printer. Seraph ONE™ will also find uses in schools to educate students about science and math.

7 NEW BUSINESSES STARTED

4 in new york state

3 outside new york state

Stealth Peptides
www.stealthpeptides.com
Stealth Peptides Incorporated, a company developing novel therapies for cardiovascular and other diseases based on technologies licensed from Cornell and other academic institutions, reported favorable results in Phase I clinical trials of Bendavia™, its lead compound, which ameliorates mitochondrial dysfunction. Stealth also announced the first patient was enrolled in its Phase II clinical study of acute ischemia reperfusion injury.

e2e Materials
www.e2ematerials.com
e2e Materials, LLC, develops advanced biocomposite materials for use in a variety of products including branded office furniture and cabinetry. The company is opening a 10,000 square foot manufacturing facility in upstate New York. The facility is projected to support up to 200 green jobs over the next five years.

GeneWeave
www.geneweavebio.com
GeneWeave Biosciences, Inc., a medical diagnostics company focused on infectious diseases, received $12 million in Series A private equity financing. The capital will be used to complete the development, validation, and clearance of the initial test for its platform.

Where are they now?

Glycobia
www.glycobia.com
Glycobia, Inc., a Cornell startup developing human therapeutics by linking the simplicity of bacteria with the sweetness of glycosylation, became the first tenant in the Kevin M. McGovern Family Center for Venture Development in the Life Sciences at Cornell University.

DNANO
www.discoverdnano.com
DNANO Systems, Inc., a company developing synthetic 3-D DNA polymers with a core focus on protein-producing gels, became the second tenant in the Kevin M. McGovern Family Center for Venture Development in the Life Sciences at Cornell University.

SafetyStratus
www.safetystratus.com
SafetyStratus, Inc., introduced LabcliQ, a web-based inspection tool that provides intelligent inspections to help manage environmental health and safety programs at universities and other research-related organizations. LabcliQ is hosted off-site and can be accessed over any web browser.

SELECT PRODUCTS FROM CORNELL TECHNOLOGIES

'Crimson Giant' Raspberry

North American Plants, LLC
Courtney Weber, Horticultural Sciences
'Crimson Giant' Raspberry is a primocane that produces fruit on the current season's growth in late summer and in the fall. This "fall-bearing" raspberry can increase margins because it produces two crops in one growing season. It is primarily adapted to growing conditions of west central New York and other regions of similar climate. The new variety is characterized by sturdy upright canes growing in a crown formation. The fruit are bright red in color, very large, and conical in shape.

Antibody Against Cysteine Dioxygenase

Abcam plc
Martha Stipanuk, Nutritional Science
This antibody is a research tool useful for the detection of cysteine dioxygenase protein in rodent and other mammalian tissues, including human. It will aid in the research on the protein and the understanding of its functions in metabolic pathways.

©ZetrOZ, LLC

UltrOZ™ Elite System

ZetrOZ, LLC
George Lewis, Biomedical Engineering
UltrOZ™ Elite is the first portable, wearable, long-duration ultrasonic therapy system for the treatment of common musculoskeletal conditions in animals, including horses. UltrOZ™ has been used to treat splints, suspensory ligaments and tendons, muscle strains, stiff joints, arthritis, and bone fractures. The portable system maximizes the advantage of using ultrasound by delivering the therapy every day without the need to tether the animal to a large, bulky system. The UltrOZ™ system comes in one package with a battery pack and ultrasound applicator.

ProSwift Monolith Columns

Dionex Corporation
Jean Frechet, Chemistry
ProSwift monolithic columns provide high-resolution and high-efficiency separations of proteins for use in the pharmaceutical and life sciences markets. ProSwift monoliths use fast gradients at low and high flow rates, thus improving productivity. In addition to high-resolution, the columns offer high loading capacity, fast separations, wide range of operational flow rates, and stability over a wide pH range.


©Pacific Biosciences

PacBio *RS*

Pacific Biosciences of California, Inc.
Harold Craighead, Applied & Engineering Physics
Watt Webb, Applied & Engineering Physics
The PacBio *RS* sequencing system resolves single molecules in real time, allowing observation of structural and cell type variation not accessible with other technologies. It features high performance optics, automated liquid handling, and an environmental control center. The instrument is designed with maximum scalability. The PacBio *RS* system is suited for a variety of applications, from *de novo* assembly and targeted sequencing to detecting base modifications.

QUANTOSE™ IR

Quantose™

Metabolon, Inc.
Bruce Kristal, Weill Cornell Medical College & Burke Medical Research Institute
Using technology co-invented by Bruce Kristal, researchers at Metabolon demonstrated the clinical utility of this diagnostic test. Quantose™ is a blood test for pre-diabetes that reflects insulin resistance. The test is based on three recently identified non-glycemic biomarkers and insulin, and detects progression to pre-diabetes earlier than traditional glycemic measures. By reflecting insulin resistance, Quantose™ provides clinicians a useful tool to stratify their patients based on risk for developing diabetes.

Cornell High Energy Synchrotron Source Compact Undulator

Alexander Temnykh, Laboratory for Elementary-Particle Physics

The CHESS Compact Undulator is a new type of pure permanent magnet (PPM) undulator for generation of X-rays at synchrotron radiation sources. It is smaller and less expensive compared to traditional undulators and provides similar X-ray beam intensities and visible spectra. Traditional undulator magnets typically require massive C-shaped frames, 2.5 meters high by 1.5 meters wide, weighing more than a ton per meter length. The new CHESS system, comprised of two PPM arrays mounted and enclosed in an innovative light-weight frame, is approximately 10 times narrower and weighs only 80kg per meter length.

Honeycomb Web Tool

Thomas Bruce, University Communications

This web-based tool aggregates links to Cornell content, including news, videos, stories, and events and then provides this database for users to search, categorize, and re-arrange into new collections. The new collections are then published to the web as pages or "cells" that can be further customized into print and email versions by end users. Communicators can construct customized presentations of existing materials for targeted audiences.

Software for Fast Population Estimation

John Bunge, Statistical Science

CatchAll is an advanced statistical software program which computes intensive estimates of total population diversity, based on count data from observations or experiments. The data is then fitted to a curve to be analyzed. Applications for this program include species diversity studies in biology and microbial ecology, and in capture-recapture analysis.

New Cancer Therapy

Xiaojing Ma, Microbiology & Immunology, Weill Cornell Medical College

In progressive cancers, the immune systems of the patients are weakened by cancer-invoked mechanisms that result in the patients' inability to resist the malignancy. A protein secreted into the blood by several cancer types that can strongly suppress the immune system, particularly the T lymphocytes which are the killers of cancers, has been identified. Blocking the activities of this secreted protein in cancer patients (e.g., liver, lung, prostate, and B cell lymphomas) can reinvigorate the patients' own immune capacity to kill cancer cells with very little toxicity. Other applications for this technology include treatment of chronic infectious diseases, such as HIV/AIDS and hepatitis.

Unique Vegetable-or Fruit-Based Snack Food

Mark Nisbet, Food Science

This new snack is made up of unique freeze-dried fruit or vegetable cubes that provide a satisfying, crunchy texture to preserve the wholesome nature of natural foods. The simple process offers a convenient and appealing way to combine high nutritional value of fruits and/or vegetables with savory flavor, fun texture, and appetizing appearance to create one-of-a-kind snacks. The snacks have a long shelf life and can be produced at low costs by using puree instead of whole fruits or vegetables.

3-D Software for Visual GPS

Noah Snavely, Computer Science

This technology allows for localization of a photographed subject from an image of its photograph taken anywhere in the world. Given an input image, the algorithm can give back an accurate estimate of where the image was taken and what direction it was facing when the photograph was taken. The technology functions by matching features in the image to a database of geo-registered structure-from-motion 3-D points and then estimating the 3-D camera pose with respect to these points.

Personalized Stringed Musical Instruments

Pouria Pezeshkian, Electrical & Computer Engineering

When a digitally controlled configuration switch is applied to traditional musical instruments such as guitars, banjos, cellos, violins, and mandolins, it introduces a new generation of personalized instruments, all with the capability of saving a user's sound configurations, allowing for easy and quick sound change. Different sound configurations can be saved into presets with the switch, enabling a musician to instantly change pickup, tone, and volume during the performance with the selection of a button.

Use of Uridine and Deoxyuridine to Treat Folate-Related Pathologies

Patrick Stover, Nutritional Science

This invention introduces nutraceutical and therapeutic uses of uridine and deoxyuridine for folate-related pathologies such as birth defects and cancer. It has been demonstrated in animal feeding studies that deoxyuridine is effective in the prevention of neural tube defects. This invention teaches the use of deoxyuridin as a supplement for child bearing age women to prevent birth defects. Compared to the traditional use of folate as the agent for neural tube defect prevention, deoxyuridine targets the metabolic pathway directly and thus extends the protection to populations that were not feasible previously and meanwhile avoids the potential adverse effects caused by folate. Uridine has also been demonstrated to be functional in cancer treatment in animal studies. These agents have commercial applications in the medicinal or nutraceutical food industry.

Proven Vaccines Against Johne's Disease

Yung-Fu Chang, Population Medicine & Diagnostic Sciences

This technology describes two patented vaccine compositions that are effective in goats and cows against Johne's disease, a chronic and infectious disease that primarily affects ruminants (e.g., cattle, sheep, buffalo, and goats) and causes diarrhea and wasting. Infected animals become increasingly emaciated and usually die as a result of dehydration and severe cachexia. In the USA, it is estimated that 68% of dairy herds contain at least one animal infected with *Mycobacterium avium* subsp. *paratuberculosis*, the bacteria that causes the disease, resulting in a loss of millions annually in the US dairy market alone.

Merlin - Online Wizard for Bird Identification

Miyoko Chu, Laboratory of Ornithology

Merlin is a self-learning system built to help users identify birds and to provide them with relevant information about the birds. This bird identification tool combines artificial intelligence with input from real-life bird watchers to produce an online "wizard" that helps users identify birds quickly and connects them to more information. Merlin distinguishes itself with the use of machine learning algorithms to perform the identification. Merlin is able to get "smarter" the more it is used as it learns from previous interactions. Merlin also offers training games, which are not only fun for users, but also gather information on the users' perceptions of the birds.

'Amber Delight' Butternut Squash

Michael Mazourek, Plant Breeding & Genetics

'Amber Delight' is a new butternut squash variety that beautifully displays in plating with a rich, sweet orange flesh, and small size. It matures early and stores better than its parents 'Honeynut' and 'Bugle'. For the grower, it offers powdery mildew resistance, high yield, and a quality product for market. 'Amber Delight' is adapted to production in the northeastern United States.

390 INTELLECTUAL PROPERTY DISCLOSURES

289 inventions

76 plants

25 copyrights

OUTREACH

CCTEC hosts, attends, and supports many events and meetings on and off campus to promote technology development and commercialization, entrepreneurship, innovations, and economic development.

JULY '11

Joined Tompkins County and Ithaca City Officials for a Tompkins County Area Development Collaborative Meeting

Alan Paau, Vice Provost, attended Cleantech Boot Camp at The Tech Garden in Syracuse, NY

Jessica Lyga, Plant Licensing Associate, attended Cornell Seed Growers Field Day

CCTEC hosted the China Jiangsu Province Science & Technology Delegation for a visit to Cornell's Ithaca Campus

CCTEC hosted China Jiangsu Province Trade Delegation for a visit to Cornell's WCMC Campus

AUGUST '11

Booth presentation at Empire Farm Days in Seneca Falls, NY

CCTEC organized and taught a one week Technology Management Summer Boot Camp for graduate students from Hongik University in Seoul, South Korea

Alan Paau, Vice Provost, attended Regional Southern Tier Council - Technology Transfer and Development Workgroup in Binghamton, NY

Alan Paau, Vice Provost, spoke at the Cornell Technology Entrepreneurship Club Seminar

SEPTEMBER '11

CCTEC hosted IP & Pizza at Cornell Laboratory of Ornithology

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

Laura Cima, Manager for Outreach & Economic Development, attended Tompkins County Area Development Board Meeting

CCTEC organized and hosted a breakfast with the Faculty Entrepreneurs Group

Alan Paau, Vice Provost, attended Foley & Lardner's 7th Annual IP Conference in New York, NY

Alan Paau, Vice Provost, spoke on a panel at SUNY's Universities as Economic Drivers, Measuring and Building Success Conference in Buffalo, NY

Bruce Toman, Technology Commercialization & Liaison Officer attended NYC Tech Connect's Biomedical Engineering Event in New York, NY

Alan Paau, Vice Provost, attended Pharmaceutical Strategic Alliance Conference in New York, NY

Seminar & Social Hour at CCTEC with Johnson School MBA students

OCTOBER '11

CCTEC representatives attended Licensing Executives Society Annual Meeting in San Diego, CA

CCTEC organized annual Cornell Technology Venture Forum in Ithaca, NY

CCTEC organized biennial Technology Innovation Gala in Ithaca, NY

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

CCTEC co-hosted NYC Emerging Technologies Summit with NYC Tech Connect and NY Academic Consortium in New York, NY

Alan Paau, Vice Provost, attended and spoke at IvyTech Annual Conference in Boston, MA

CCTEC organized and taught a four day Technology Management Fall Workshop for Korean technology managers

Alan Paau, Vice Provost, spoke on a panel at China Entrepreneurs Forum in Ithaca, NY

Brian Kelly, Director, spoke on a panel at Technology Transfer Summit 2011, on "Efficient Use of Capital, Working Collaboratively, and Bringing New Therapies to Markets and Patients" in Bethesda, MD

CCTEC co-sponsored Entrepreneurship Seminar on “Financial Services Startups” in Ithaca, NY

Seminar & Social Hour at CCTEC with Johnson School MBA students

NOVEMBER '11

Laura Cima, Manager for Outreach & Economic Development, attended Tompkins County Area Development Board Meeting

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

CCTEC co-sponsored Entrepreneurship Seminar on “From Investment to Exit - Lucky or Brilliant!” in Ithaca, NY

CCTEC hosted IP & Pizza in New York, NY

Seminar & Social Hour at CCTEC with Johnson School MBA students

CCTEC hosted IP & Pizza in Ithaca, NY

Alan Paau, Vice Provost, attended Drug Development Boot Camp at Harvard University in Cambridge, MA

Martin Teschl, Technology Commercialization & Liaison Officer, attended Cornell Center for Materials Research (CCMR) JumpStart Board Meeting

Bruce Toman, Technology Commercialization & Liaison Officer. attended Society for Neuroscience Annual Meeting in Washington, DC

Alan Paau, Vice Provost, visited Distributed Sun in Washington, DC

CCTEC hosted Chongqing Academy of Science & Technology Delegation for a visit to CCTEC's WCMC Office

CCTEC organized and hosted a breakfast with the Faculty Entrepreneurs Group

CCTEC hosted Inventions Roundtable in New York, NY

DECEMBER '11

Alan Paau, Vice Provost, spoke on a panel and gave keynote address at Knowledge Exchange (KE) Conference in Hong Kong

Bruce Toman, Technology Commercialization & Liaison Officer, spoke at WCMC Entrepreneurship & Venture Capital Club Meeting on "Cornell Technology Transfer"

Laura Cima, Manager for Outreach & Economic Development, attended Global Connect Summit in San Diego, CA

Jessica Lyga, Plant Licensing Associate, attended Agribusiness Economic Outlook Conference in Ithaca, NY

Brian Kelly, Director, spoke on a panel at NYC Tech Connect Riverside Chat on "Working with the Technology Transfer Team: A Key Step on the Commercialization Path" in New York, NY

Alan Paau, Vice Provost, attended BayHelix Shanghai Annual Conference

JANUARY '12

CCTEC organized and hosted a breakfast with the Faculty Entrepreneurs Group

Alan Paau, Vice Provost, attended "Reception for Cornellians Working in Healthcare", hosted by Bard and Versant Ventures during the J.P. Morgan Chase Healthcare Conference in San Francisco, CA

Laura Cima, Manager for Outreach & Economic Development, attended Tompkins County Economic Council Meeting

Alan Paau, Vice Provost, attended BayHelix Annual Conference in San Francisco, CA

Alan Paau, Vice Provost, attended Cornell Asian Alumni Association's Pan-Asian Banquet

CCTEC co-sponsored Entrepreneurship Seminar on “The Good, The Bad, and The Ugly: Case Studies from a Venture Portfolio” in Ithaca, NY

Alan Paau, Vice Provost, attended J.P. Morgan Chase Healthcare Conference in San Francisco, CA

FEBRUARY '12

CCTEC hosted IP & Pizza at the Department of Electrical & Computer Engineering

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

Alan Paau, Vice Provost, attended a Welcome Reception for the new Chinese Counselor for Science & Technology to New York Consulate General Office of the People's Republic of China

CCTEC co-sponsored Entrepreneurship Seminar on “ABCs of B Corporations” in Ithaca, NY

Joined Tompkins County and Ithaca City Officials for a Tompkins County Area Development Collaborative Meeting

Seminar & Social Hour at CCTEC with Johnson School MBA students

CCTEC hosted China Biomedicine Delegation for a visit to Cornell's WCMC Campus and Alan Paau, Vice Provost, presented "Cornell University & Its Technology Transfer Program"

Laura Cima, Manager for Outreach & Economic Development, attended SUNY BEST Meeting in Binghamton, NY

Attendees listen to a panel at Medical Device Development Boot Camp.

Networking at CCTEC's New Business & Emerging Technology Showcase.

Seminar & Social Hour guests listen to a presentation.

Professor Aihao Ding, Microbiology & Immunology of Weill Cornell Medical College, presents at Inventions Roundtable.

Cornell Technology Venture Forum attendees view posters on emerging technologies and new businesses from Cornell.


Sr. Vice Provost for Research, Robert Buhrman, presents the Ezra Technology Innovator Award to Professor Francis Barany, Microbiology & Immunology of Weill Cornell Medical College at the 2011 CCTEC Technology Innovation Gala Reception.

MARCH '12

CCTEC hosted Inventions Roundtable in New York, NY

Seminar & Social Hour with CCTEC and the Entrepreneurship & Venture Capital Club of Weill Cornell Medical College

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

CCTEC hosted IP & Pizza in New York, NY

CCTEC organized and hosted a breakfast with the Faculty Entrepreneurs Group

Alan Paau, Vice Provost, attended Annual Banquet of The American Intellectual Property Law Association in New York, NY

Alan Paau, Vice Provost, spoke at the Cornell Trustees Community Communication Meeting, on "CCTEC Regional Economic Development Activities" in Ithaca, NY

Alan Paau, Vice Provost, spoke on a panel at the China 2020 Conference, organized by the Global China Connection and hosted by Columbia University, on "Startups 2020" in New York, NY

CCTEC representatives participated in Pre-Seed Workshop in Ithaca, NY

Jeff Fearn, Senior Technology Commercialization & Liaison Officer, spoke on "Career Options for PhDs in the Life Sciences Related to Technology Transfer" at BIOMD7800

Alice Li, Director, attended Association of University Technology Managers (AUTM) 2012 Annual Meeting in Anaheim, CA

CCTEC hosted IP & Pizza in Ithaca, NY

APRIL '12

Organized and hosted annual CCTEC New Business & Emerging Technology Showcase at Entrepreneurship@Cornell Celebration

Seminar & Social Hour at CCTEC with Johnson School MBA students

Alan Paau, Vice Provost, spoke at the International Medical Technology Innovation Conference, hosted by the Skolkovo Foundation and organized by the Elsevier Business Intelligence, Life Science Angel Network, and the Open University of Skolkovo, on "Getting Started: Idea, University, Angels" in Moscow, Russia

Laura Cima, Manager for Outreach & Economic Development, attended CenterState CEO Annual Meeting in Syracuse, NY

CCTEC co-hosted Upstate New York Biocareer Connection in Ithaca, NY

Jessica Lyga, Plant Licensing Associate, attended CIOPORA, International Community of Breeders of Asexually Reproduced Ornamental and Fruit Varieties Meeting in Miami, FL

Amanda Crossett, Outreach & Economic Development Specialist, attended SUNY BEST Meeting in Ithaca, NY

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

Joined Tompkins County and Ithaca City Officials for a Tompkins County Area Development Collaborative Meeting

Booth presentation at Cornell University Resource Sharing Event for Local Municipalities in Ithaca, NY

CCTEC hosted IP & Pizza in Ithaca, NY

MAY '12

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

Alan Paau, Vice Provost, visited Shanghai Tsinghua University to discuss potential projects with the Green Leap Center in Shanghai, China

Laura Cima, Manager for Outreach & Economic Development, attended Tompkins County Area Development Annual Meeting

CCTEC participated in NYC Emerging Technologies Summit on "Therapeutics, Diagnostics, and Medical Devices" in New York, NY

CCTEC hosted Inventions Roundtable in Ithaca, NY

Alan Paau, Vice Provost, presented at the Upstate New York Translational Research and Education Consortium (UNYTE), on "Cornell University and Its Technology Transfer Program" in Ithaca, NY

CCTEC representatives attended Cornell Center for Materials Research (CCMR) Annual Symposium

CCTEC organized and hosted a breakfast with the Faculty Entrepreneurs Group

Laura Cima, Manager for Outreach & Economic Development, attended Tompkins County Area Development Board Meeting

Alice Li, Director, presented at the 3rd China Pharma, Biotech & Chemical IP Forum & Innovation Press Conference in Taizhou, China

CCTEC co-hosted Drug Development Boot Camp with Aptiv Solutions in New York, NY

Bruce Toman, Technology Commercialization & Liaison Officer, attended New York Academic Consortium (NYAC) All Office Meeting

CCTEC representatives attended 2012 UNYTECH Venture Forum in Buffalo, NY

JUNE '12

CCTEC representatives attended BIO International Convention in Boston, MA

CCTEC hosted a Cornell Reception at BIO International Convention in Boston, MA

CCTEC hosted a Cornell Technology Road Show in Boston, MA

CCTEC hosted Economic Development Community Roundtable with individuals from central NY involved in economic development activities in Ithaca, NY

CCTEC hosted Inventions Roundtable in New York, NY

Seminar & Social Hour with CCTEC and the Entrepreneurship & Venture Capital Club of Weill Cornell Medical College

Chidori Boeheim, Technology Commercialization & Liaison Officer, attended Association of University Technology Managers (AUTM) 2012 Software Course in Jersey City, NJ

Alan Paau, Vice Provost, presented at Southwest Jiatong University, on "Technology Commercialization & Sustainable Development - the Roles of University, Business, and Government" in Changdu, China

Alan Paau, Vice Provost, visited Nanjing Agriculture University to discuss potential joint technology transfer efforts in Nanjing, China

Alan Paau, Vice Provost, presented at the Centro Nacional de Investigaciones Cardiovasculares, on "Influences of Industry Trends and New Biomedical Research Approaches to Technology Management and Transfer" in Madrid, Spain

109 Total Outreach Activities

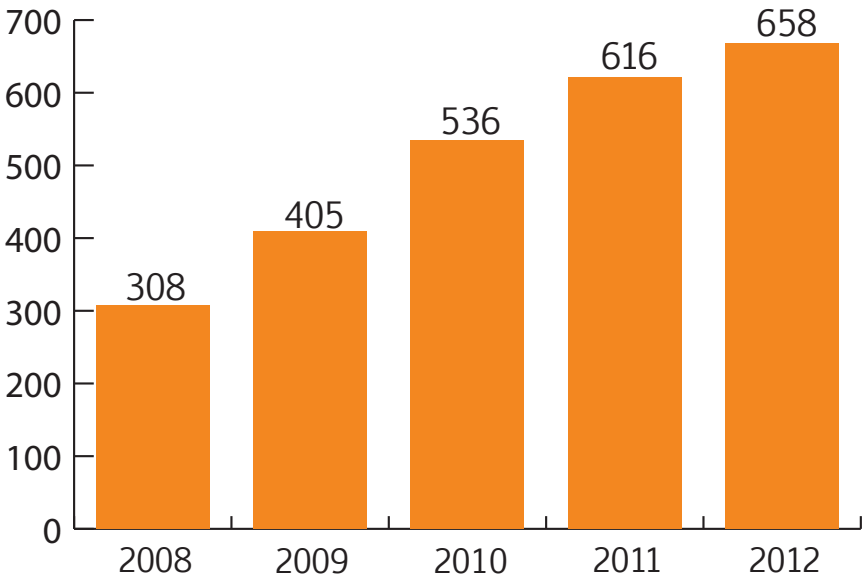
45 hosted by cctec

64 hosted by others

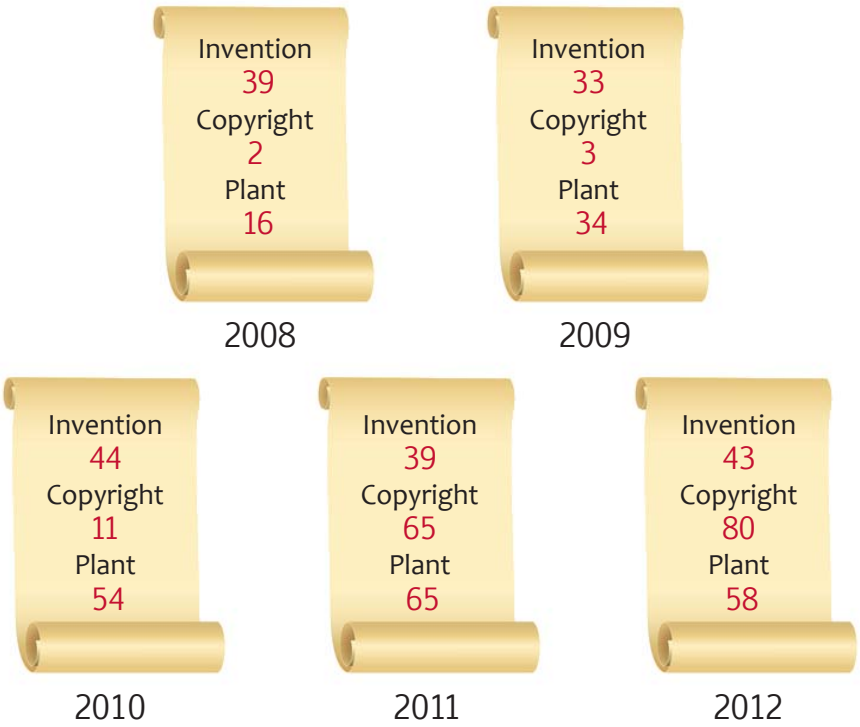
TECHNOLOGY TRANSFER ACTIVITY*

AGREEMENTS

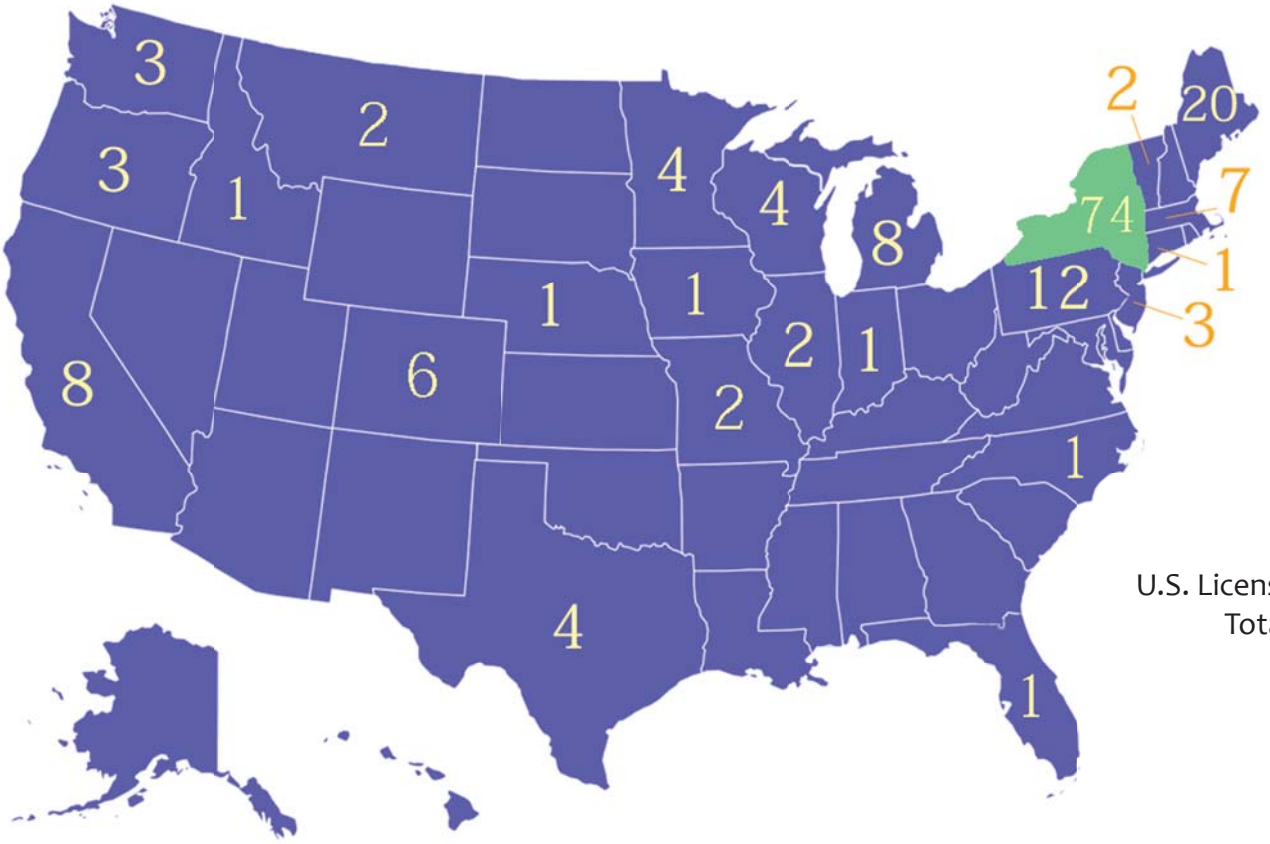
In FY 2012, CCTEC completed a total of 658 agreements related to technology management (excluding amendments to existing agreements).



COMMERCIAL LICENSES

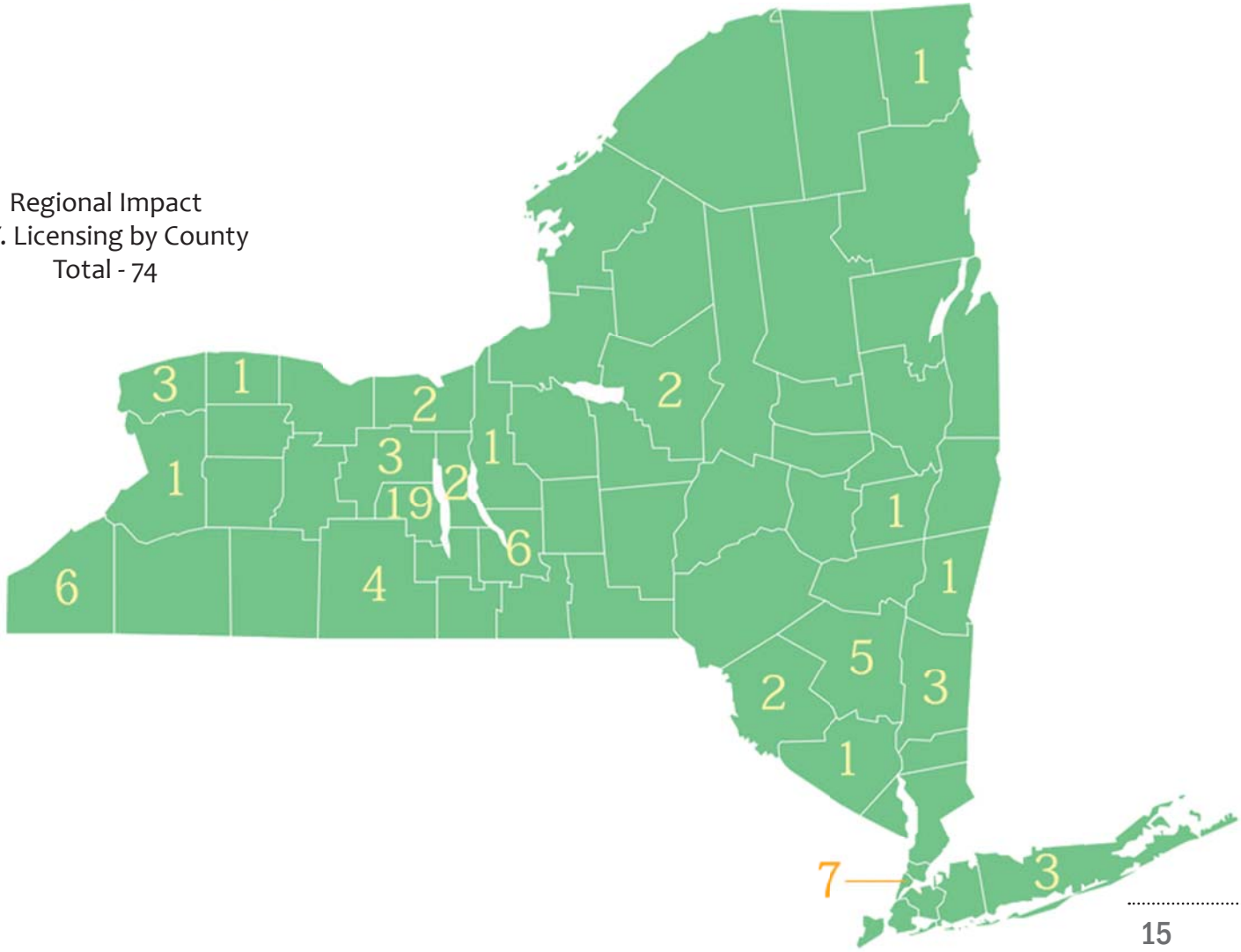


*Technology transfer activity metrics may be different from those reported in previous reports due to minor post-report adjustments.

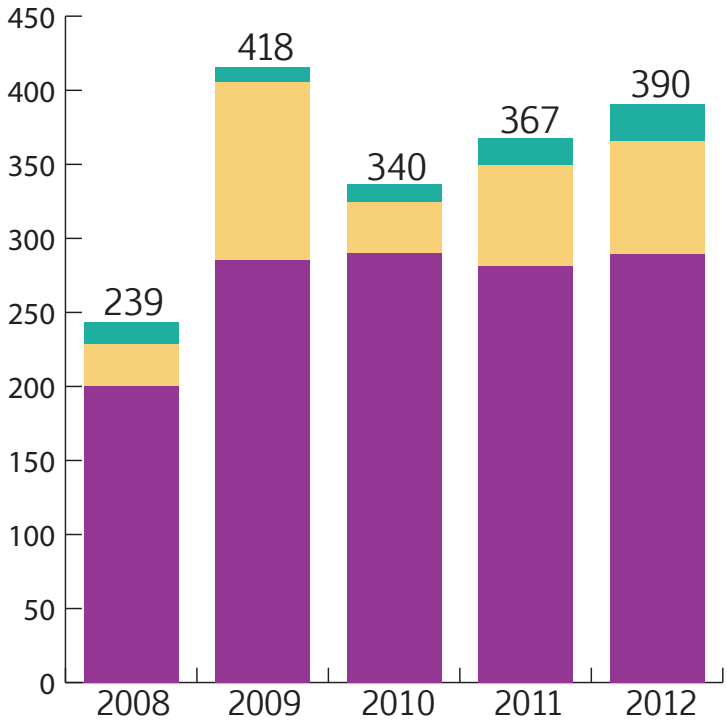


U.S. Licensing by State
Total - 171

Regional Impact
N.Y. Licensing by County
Total - 74



INTELLECTUAL PROPERTY DISCLOSURES



In FY 2012, CCTEC received 390 disclosures for 289 inventions, 76 plants, and 25 copyrights.

Copyrights
Plants
Inventions

PATENTS

In FY 2012, CCTEC filed 193 U.S. provisional patent applications, 123 U.S. nonprovisional patent applications, and 186 international patent applications. Cornell was issued a total of 158 patents - 89 U.S. and 69 international.

Filed	2008	2009	2010	2011	2012
U.S. Provisional	150	145	166	165	203
U.S. Nonprovisional	91	108	153	119	120
International	337	274	172	261	198
TOTAL	578	527	491	545	521

Issued	2008	2009	2010	2011	2012
U.S.	57	75	75	82	91
International	105	96	79	112	75
TOTAL	162	171	154	194	166

REVENUE

	2008	2009	2010	2011	2012	5-YR TOTAL
Licensing	$6,831,463	$5,084,199	$9,041,994	$7,001,172	$9,132,385	$37,091,213
Patent Exp. Reimbursement	$2,703,216	$2,670,778	$2,712,566	$2,398,078	$3,037,493	$13,522,131
Extraordinary*	$18,385	$44,723	$20,112,055	$58,503,289	$474,521	$79,152,973
TOTAL	$9,553,064	$7,799,700	$31,866,615	$67,902,539	$12,644,399	$129,766,317

*Extraordinary income includes non-recurring items such as sale of equity and payments resolving patent litigation cases.

As of the end of FY 2012, Cornell holds private equity in 27 companies with licensed Cornell technology, the value of which cannot be reliably estimated at this time. Cornell holds promissory convertible notes in the principal amount of $3,359,026.

EXPENSES

	2008	2009	2010	2011	2012	5-YR TOTAL
Legal	$5,291,847	$5,186,172	$6,201,995	$5,561,131	$5,386,858	$27,628,003
Office Operations	$4,303,938	$4,717,159	$4,125,926	$4,135,900	$4,081,447	$21,364,370
Extraordinary*	$9,523,188	$1,548,726	$686,507	$126,652	$193,154	$12,078,227
TOTAL	$19,118,973	$11,452,057	$11,014,428	$9,823,683	$9,661,459	$61,070,600

*Extraordinary expenses include expenses for litigation.

MANDATORY DISTRIBUTIONS

	2008	2009	2010	2011	2012	5-YR TOTAL
Inventor-Author Share	$1,846,799	$1,948,911	$3,064,194	$13,468,127	$3,197,335	$23,525,366
Joint Titleholders Share	$236,481	$142,066	$1,048,195	$4,666,829	$273,098	$2,166,669
Research Labs/Dept/ College Share	$1,045,720	$1,740,795	$1,931,131	$1,962,641	$1,987,132	$8,667,419
CCTEC-University Share	$2,308,536	$1,865,224	$5,091,074	$3,798,871	$3,591,266	$16,654,971
TOTAL	$5,437,536	$5,696,996	$11,134,594	$23,896,468	$9,048,831	$55,214,425

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