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FY 2009
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- Start-up Companies Formed from CU IP: 11
- Service Agreements Executed (see note): 687
- Licensing Revenue (in millions): $4.4
- IP-induced Sponsored Research (in millions): $16.7
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- Total — all expenses: $4,098,320

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<table>
<thead>
<tr>
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Invention Disclosures, Patent Applications and Exclusive Licenses/Options
Summary: Fiscal Year 2008-09

In FY 2008-09, the University of Colorado Technology Transfer Office (TTO) continued to build upon the high-quality research of CU investigators and delivered value to its customers and stakeholders. Despite the national economic downturn, TTO maintained a brisk deal flow, expanded the CU technology portfolio, and continued to increase its presence in the Colorado and national technology community. This report provides proof points demonstrating TTO’s performance and relevance to our community. Some highlights from the last year of technology transfer at CU:

- Continued growth of CU’s pipeline of technologies: this was our best year yet for new invention disclosures, especially in renewable energy, bioscience and related areas. Our continued positive relations with CU investigators have been crucial to this growth, and have improved the overall quality of the disclosures we receive.
- Continued growth of CU’s patent portfolio (patent applications, applications in process and patents issued); although we experienced a slight budget contraction for new patent filings, strong patent reinforcements from licensees more than offset this decrease.
- Continued excellence in exclusive options and licenses, and company creation: our performance in these areas places CU TTO at a nationally prominent level.
- Continued expansion of CU’s technology transfer network: TTO’s partnerships with local incubators, business advisors, investors and entrepreneurs help create a ‘running start’ for new companies emerging from the University.
- Continued excellence in CU’s technology maturation and commercialization initiatives. The first full year of our recently developed new business development group produced strong results.
- Continued excellence in exclusive options and licenses, and company creation: our performance in these areas places CU TTO at a nationally prominent level.

Major Funding Events for CU Licenses

Based on more than 50 separate financial transactions, FY 2008-09 saw nearly $180M of financing for companies created based on CU IP, a figure that is almost $20M greater than last year. Driving this increase were financings of mRagen, Sierra Neprx, OPX, Globinmem and Sundrop Fuels. Funding occurred in all categories except grants (non-federal) and IPOs.

Type of Funding FY 08-09 Amount
Federal Grant $3,632,437
Seed/Bridge $2,095,000
Series A $39,941,176
Series B $17,500,000
State Funding $1,587,163
Series C, D, E, F $40,000,000
TTO funding $707,987
SBI/STTR $12,762,856
Total Financing $178,268,619

New Business Development Based on CU Intellectual Property

In the last 16 years, 94 companies have been formed based on CU IP, 14 are known to be non-operational. Of the 80 companies known to be operating,

- 77 have operations in Colorado (although the headquarters may be located outside state).
- 22 have received CU Technology Transfer Office (TTO) Proof of Concept investments.
- 7 have “gone public,” becoming publicly traded companies (either through an IPO or via a reverse merger).
- 12 have been acquired by public companies (including five from the above seven that have gone public).

Companies Created Based on CU IP, FY 2008-09

QGenta — Therapeutics for the treatment of solid tumor cancers
Biotricity Medical — Implantable biogenerator to create an indefinite power supply for implanted medical devices
LineRate Systems — Parallel processing technology for multicore computing
ION Engineering — Novel material for cost-effective carbon sequestration and natural gas sweetening
Tusaar — Technology for removing metals from water, for industrial and environmental applications
miRagen — MicroRNAs for the diagnosis, treatment and prevention of heart disease
AlloGenesis — Wound healing extract for treating burns and other tissue damage
TechoShark — Mobile social networking software
QFlux — Novel low-cost method of producing uniform nanoparticles for energy applications
Peak BioSciences — Implantable filament for delivering cancer therapeutics to tumors
Phosbes Energy — Photovoltaic power conversion method enabling more efficient grid connection

Recognizing Excellence in Technology Transfer

The CU Technology Transfer Office presented its annual awards on January 12, 2009 to researchers working in areas ranging from cancer treatments to vascular imaging to fuel cells, and to companies and business advisors supporting innovation. Awards were given to:

Theodore W. Randolph (UCB) & John F. Carpenter (UCD), Distinguished Interdepartmental Inventors
Richard D. Noble, Inventor of the Year, UCB
John D. Carroll & Shiah-Yung (James) Chen, Inventors of the Year, UCD
Heidi L. Ford & Rui Zhao, New Inventors of the Year, UCB
Han (Hubert) Yin, New Inventor of the Year, UCB
Sara Honn Qualls, New Inventor of the Year, UCCS
Boulder Innovation Center (Executive Director Tim Bourj), Business Advisor of the Year
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Taligen Therapeutics, Inc., Bioscience Company of the Year
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- Continued growth of CU’s pipeline of technologies: this was our best year yet for new invention disclosures, especially in renewable energy, biocompatibility, and medical devices.

- Significant contributions to the Proof-of-Concept grant and investment fund: TTO’s team has outstanding expertise and high morale, and our office can expect a continued high level of service.

- Fiscal Year 2008-09 year-end closing balance of $6.1 million, down from $6.5 million in FY 2007-08.

- Operating expenses for at least the next two to three years. By the end of FY 2011, TTO expects that annual licensing revenue will not be sufficient to cover operating expenses for at least the next two to three years.

- Reduction in our contributions to the Proof-of-Concept grant and investment fund: the national recession has impacted TTO in FY 2009-10.

- TTO has disbursed approximately $4.2M in POC grants and $2M in POC investments. The POC awards from FY 2008-09 are identified below:

- Continued excellence in exclusive options and licenses, and
- Clinician involvement related to early-stage research.

- Relationships with the Colorado technology entrepreneurship community: TTO’s partnerships with local incubators, business advisors, investors and entrepreneurs help create a “running start” for new companies emerging from the University.

- Over the last few years TTO has been reporting an anticipated revenue decline based on the expiration of a key patent estate and completion of a royalty stream monetization. In 2008-09, this predicted revenue decline was amplified by the national economic recession. As the recession continued, license product sales slowed, licensee development programs were curtailed, and funding ground down to a near-stallion. Revenue for 2008-09 was $4.4 million, the lowest level for many years. To offset the low revenue, TTO drew down $1.9 million from a CU Treasury loan.

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Medical Devices 19%  
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Biomaterials 6%  
Processes, Drug Delivery  
Other 3%

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