COMMERCIALIZATION BY THE NUMBERS

TECHNOLOGY COMMERCIALIZATION & KNOWLEDGE TRANSFER

THE OHIO STATE UNIVERSITY
It is extremely gratifying to see the how our faculty, students, and community have responded to the changes in commercialization and the benefits we will ultimately see in translating research to products that impact our world.

— GEOFF CHATAS
Chief Financial Officer and Senior Vice President, Business and Finance

Commercialization requires engagement from our outstanding faculty and staff. This year, we had incredible participation.

— BRIAN CUMMINGS
Vice President of Technology Commercialization

TECHNOLOGY COMMERCIALIZATION & KNOWLEDGE TRANSFER (TCO)

OUR MISSION
To build creativity, responsiveness, and accountability into the creation of new programs and partnerships that maximize the impact of our research and enhance the student and faculty experience.
### AGREEMENTS

<table>
<thead>
<tr>
<th></th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Licenses</strong></td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td><strong>Tangible Property</strong></td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td><strong>CDA</strong></td>
<td>833</td>
<td>1,029</td>
</tr>
<tr>
<td><strong>MTA</strong></td>
<td>524</td>
<td>661</td>
</tr>
<tr>
<td><strong>Other Agreements</strong></td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,399</td>
<td>1,753</td>
</tr>
<tr>
<td><strong>Startups (also included in licenses)</strong></td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

**% Increase in Agreements:** '

<table>
<thead>
<tr>
<th></th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1,399</td>
<td>1,753</td>
</tr>
</tbody>
</table>

**Increase in Agreements: 25%**

### NEW INVENTORS

<table>
<thead>
<tr>
<th></th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Inventors</strong></td>
<td>418</td>
<td>497</td>
</tr>
<tr>
<td><strong>Repeat Inventors</strong></td>
<td>301</td>
<td>285</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>651</td>
<td>782</td>
</tr>
</tbody>
</table>

**New Inventors in FY 2013:**
- Total: 497
- 2011: 418
- 2012: 418
- 2013: 497

**Twice as many new startups:**
## REVENUE

**$2,105,127**

$583,838 from FY 2013 deals

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>2,105,127</td>
<td>583,838</td>
<td>2,105,127</td>
</tr>
</tbody>
</table>

## NEW INVENTION DISCLOSURES

- **2013**
  - Total: 384
  - Current year deals: 213
  - Previous year deals: 171

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventions</td>
<td>213</td>
<td>319</td>
<td>384</td>
</tr>
</tbody>
</table>

## PATENTS

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. FILINGS</td>
<td>144</td>
<td>212</td>
<td>234</td>
</tr>
<tr>
<td>U.S. ISSUED</td>
<td>29</td>
<td>41</td>
<td>62</td>
</tr>
<tr>
<td>FOREIGN ISSUED</td>
<td>31</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>TOTAL ISSUED</td>
<td>60</td>
<td>66</td>
<td>90</td>
</tr>
</tbody>
</table>

### Patent Breakdown by College

- **Medicine**: 49
- **Food, Agricultural & Environmental Sciences**: 8
- **Arts & Sciences**: 9
- **Pharmacy**: 10
- **Engineering**: 13

- Patent breakdown by College

**FY 2013 Invention disclosures from FY 2013 deals**: $2,105,127

**Revenue from FY 2013 deals**: $583,838
Abby W. and BIANCA M. comprise the team dubbed “The Six Pack Chicks.” Both women are studying Design in the College of Arts & Sciences and have been working with TCO to develop, market, and patent their idea.

Justin McGee is the director of CoStart, TCO’s student-run initiative for those with big ideas and an entrepreneurial spirit. Currently an MD/MBA candidate at The Ohio State University College of Medicine and Fisher College of Business, Justin is the Entrepreneurship Fellow at the OhioHealth Research and Innovation Institute.

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Significant growth in student engagement attributed to 3 new student programs and increased faculty involvement in student endeavors.

CoStart
costart.osu.edu

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costart.osu.edu
NEW STUDENT PROGRAMS FORMED IN FY 2013

**COSTART**
CoStart is a student-led, student-run initiative to enhance the educational experience on campus and provide a professional development channel for some of our most creative ideas and startups.

**CAST**
CAST gives selected students the chance to take an existing university technology through the commercialization process. They have the opportunity to work closely with the technology inventor, conduct market research, and contact potential customers.

**BOSS**
BOSS is for graduate and undergraduate students who want to be their own bosses. It is a pitch competition where judges decide which promising new student startups receive access to all of TCO’s services in addition to other prizes.

To learn more, visit: tco.osu.edu/revolution

COMMERCIALIZATION SERVICES

In an effort to bring Ohio State’s pharmaceutical innovations to market, TCO partners with the newly-formed Drug Development Institute (DDI) to accelerate the formation of new compounds through pre-clinical and clinical development. The partnership is currently advancing six projects.

Cancer.osu.edu
NEW VENTURES

THE NEW VENTURES TEAM at TCO fuses human capital, funding, and technology to create high growth startup companies. New Ventures works on 25-30 high potential technologies each year and provides methodology support, connections, and resources needed to produce a viable startup.

COMPANIES STARTED THIS FISCAL YEAR

2011
2 startups

2012
5 startups

2013
10 startups

OHIO STATE STARTUPS BY INDUSTRY

SOFTWARE
3 Medicine
1 Arts & Sciences
1 Engineering

HEALTH & WELLNESS
2 Human Ecology
1 Medicine

ANIMAL HEALTH
1 Veterinary Medicine

NANOTECHNOLOGY
1 Engineering

COMMERICALIZATION BY THE NUMBERS

NEW VENTURES

BUSINESS EXECS NEEDED. The Startup Snapshot events provide the chance for entrepreneurs, investors, and inventors to interact, connect, and preview a glimpse of Ohio State’s startup portfolio. Technologies span the IT, Life Science, and Physical Science industries. Startup Snapshot events are held regularly during the course of an academic year.

OHIO STATE STARTUP COMPANIES RAISED OVER $12 MILLION IN THE LAST TWO YEARS.
Ohio State Technologies in Development

Row 1: Total Horse, Mouseville, MRE, Curio, SimTech, Monochromatic X-Ray
Row 2: Accelematics, Ambassador, Personalized Spine, Sensetronics, Statin Tech, HAWC
Row 3: Sinusitis, Readiness Analytics, nSpire, Simple-Fill, Free Yo, EMS Link

Ohio State Startup Successes

Inmobly raised over $650,000 to develop its technology for ending lag times for videos and mobile devices. Currently there are three Columbus employees and 15 in Cairo. In 2013, CEO Hesham Gamal received the prestigious Ernst & Young EDGE Award.

Developed at The Ohio State University Wexner Medical Center, Ambassador is an advanced modeling and software toolset designed to help U.S. hospitals and health care systems maximize performance on standardized measures of patient experience that influence third-party payer reimbursement.

Gas prices have long been a pain point for the majority of consumers, giving people incentive to switch to less expensive natural gas vehicles. Ohio State researchers invented a system designed to refill natural gas vehicles in a cost- and time-effective manner.

A startup company focused on nanoparticle materials, CoreQuantum’s main product, MultiDot, is a group of semiconductor nanoparticle quantum dots that allows researchers to continuously track tagged molecules with greater brightness, longevity, and stability than currently available technologies.

Commercialization by the Numbers

Row 1: Total Horse, Mouseville, MRE, Curio, SimTech, Monochromatic X-Ray
Row 2: Accelematics, Ambassador, Personalized Spine, Sensetronics, Statin Tech, HAWC
Row 3: Sinusitis, Readiness Analytics, nSpire, Simple-Fill, Free Yo, EMS Link
NEW PROGRAMS

The Colleges of Medicine, Pharmacy, Arts and Sciences, Engineering, and Food, Agricultural, and Environmental Sciences each have their own Technology Review Board (TRB). The TRBs are comprised of industry subject matter experts who are committed to advancing Ohio State’s technologies.

ENTREPRENEURIAL SCHOLARS

TCO created a unique group of entrepreneurial faculty who serve as liaisons between TCO and their colleges. The Scholars group is building the foundation for an exclusive peer-to-peer network in translating research into impactful commercial outcomes.

College of Arts and Sciences

Dehua Pei
Professor of Chemistry and Biochemistry
Erich Grotewold
Professor of Molecular Genetics
Harris Kagan
Professor of Physics

College of Nursing

Mary Beth Happ
Distinguished Professor of Critical Care Research

College of Pharmacy

Robert Brueggemeier
Professor, Medicinal Chemistry and Pharmacognosy

College of Engineering

Betty Lisa Anderson
Professor of Electrical & Comp. Engineering
Joseph Heremans
Professor of Mech. and Aerospace Engineering
Stephen Lee
Office Associate, CCC
William Marras
Professor of Integrated Systems Engineering
Jessica Winter
Associate Professor of Chemical & Biomolecular Engineering

College of Food, Agricultural, and Environmental Sciences

Monica Giusti
Associate Professor of Food Science and Technology

College of Medicine

Robert Baiocchi
Associate Professor of Hematology
Albert Lai
Assistant Professor of Biomedical Informatics
Cameron Rink
Assistant Professor of Vascular Surgery
Michael Tweedie
Professor of Radiology
The Ideation Lab is where ideas are brought to life. Design and prototyping experts help an inventor further his or her concept and determine the greatest potential to maximize an invention’s value. The Ideation Lab assists with developing commercial applications through idea generation sessions that empower the “Techperts”, or inventors, to identify and discover innovative trends.

NEW PRODUCTS DESIGNED 37

The Software Prototyping Team works to create the best prototypes out of Ohio State’s software inventions. They pride themselves on a rapid iteration and active engagement. Informally dubbed “The Shop”, the team continues to work with the range of enterprise level and native mobile application software that is disclosed to TCO.

STARTUPS SERVED 30

Brand identities constructed 25
Virtual prototypes 8
Working prototypes 4

new products designed 37

startups served 30

commercialization by the numbers

new products designed

startups served

commercialization by the numbers
UNDER EXECUTIVE LEADERSHIP OF CLAY MARSH, Vice Dean of Innovation at The Ohio State University’s College of Medicine, the IDEA studio combines design thinking with today’s emerging and progressive healthcare problems. Clay’s work is world renowned and helped champion Ohio State’s Personalized Health Care Center which is earning international distinction through its leadership in a novel approach to personalized health care known as P4 Health – predictive, preventive, personalized and participatory medicine. P4 Health focuses on creating systems to deliver health care focused on bringing the right intervention or treatment to the right person at the right time to save money and improve outcomes.

The IDEA Studio in Healthcare and Design was created to accelerate discovery, innovation and commercialization in health care through novel solutions.
Stop by our office in the South Campus Gateway.
1524 N. High Street
TECHNOLOGY COMMERCIALIZATION & KNOWLEDGE TRANSFER

ADDRESS
1524 N HIGH STREET
COLUMBUS, OH 43201

PHONE
614.292.1315

EMAIL
INNOVATION@OSU.EDU

tco.osu.edu

Browse technologies, learn about new programs, and even submit an idea on our NEW WEBSITE that launched in FY 2013.