ANNUAL REPORT
FISCAL 2021 BY THE NUMBERS
INVENTION REPORTS RECEIVED IN FISCAL 2021: 211 reports

DEPARTMENTS AND UNITS ACROSS CAMPUS WORKED WITH OTM IN 2021: 55 units

INVENTIONS 5-YEAR HISTORY:
- 2017: 242 inventions
- 2018: 201 inventions
- 2019: 228 inventions
- 2020: 215 inventions
- 2021: 211 inventions

26% of faculty who submitted an invention report in 2021 are working with OTM for the first time.
216 U.S. Patent Applications

78 U.S. Patent Applications

U.S. Patent Applications 5-Year History

2019
2017
2018
2019
2020
2021
224
240
209
201
216

41% of U.S. patents issued in fiscal 2021 were licensed or optioned prior to issuance
61 LICENSES AND OPTIONS TRANSFERRED 149 TECHNOLOGIES IN FISCAL 2021

LICENSES & OPTIONS 5-YEAR HISTORY

2017 2018 2019 2020 2021
50 45 43 60 61

LICENSES & OPTIONS BY ENTITY TYPE

EXISTING COMPANIES
STARTUPS
SPONSORED RESEARCH
EDUCATIONAL & NON-PROFIT INSTITUTIONS

23 16 14 8
A FEW OF OUR PARTNERS

OTM HAS RELAUNCHED OUR PROOF-OF-CONCEPT PROGRAM

The Illinois Proof-of-Concept program (IPOC) funds projects that facilitate the transformation of UIUC research innovations into useful products and services that benefit society.

LEARN MORE ONLINE AT OTM.ILLINOIS.EDU/IPOC
STARTUPS

FIRST LICENSES TO STARTUPS IN FISCAL 2021

5 7 10 6
2017 2018 2019 2020 2021

FIRST LICENSES TO STARTUPS
5-YEAR HISTORY

ANNUAL REPORT
FISCAL 2021 BY THE NUMBERS

STARTUP PIPELINE

1. EMERGING
2. OPTIONED
3. LICENSE NEGOTIATION

HEALTHCARE
SOFTWARE
PHYSICAL SCIENCE
MATERIALS
2021 FIRST LICENSES TO STARTUPS

**Cystetic Medicines  ● CHAMPAIGN, IL**
Developing a treatment for cystic fibrosis using the ion channel-forming drug amphotericin to restore infection-fighting properties in cells. Licensing intellectual property developed by Martin Burke; $25 million in financing provided by Deerfield Management.

**Gates AgOne  ● ST. LOUIS, MO**
A 501 (c)(3) non-profit launched by the Bill & Melinda Gates Foundation and licensing intellectual property developed by Stephen Long and the R.I.P.E initiative. Gates AgOne will accelerate efforts to provide smallholder farmers in developing countries with access to the tools they need to sustainably improve crop productivity and adapt to the effects of climate change.

**NutraMaize  ● WEST LAFAYETTE, IN**
Bringing the benefits of antioxidant-rich, high-carotenoid orange corn to Americans. Originally developed by Professor Torbert Rocheford to help alleviate vitamin A deficiencies in Africa. Licensing intellectual property created at the University of Illinois and Purdue.
Orthogonal Biologics  • CHAMPAIGN, IL
Using protein engineering to make drugs that bind virus spikes with high affinity and specificity for therapeutics that render a virus non-infectious. Currently focused on SARS coronavirus 2, the cause of COVID-19, and PDGFRα for human cytomegalovirus, a leading cause of neurological defects in newborn children.

Rangerfish  • CHAMPAIGN, IL
Formed to ease and accelerate compliance with established industry cybersecurity standards and best practices such as the NIST Cybersecurity Framework and Department of Defense Cybersecurity Maturity Model Certification (CMMC). Licensing intellectual property developed by Randall Sandone, David Nicol and Gabriel Weaver at the University’s Information Trust Institute.

Sonica Health  • NILES, IL
A digital medicine company commercializing body-integrated sensor technology with an initial focus on catching early signs and symptoms associated with COVID-19. Licensing intellectual property developed by John Rogers, formerly of the University of Illinois.
66+
ACTIVE STARTUPS
FOUNDED ON
UNIVERSITY OF
ILLINOIS IP HAVE
OFFICES ACROSS THE
COUNTRY
2021 REVENUE

$13,855,197

$3,027,109 Patent Expense Reimbursement

Actual Distributions:

$3,257,361 Inventors & Creators
$2,363,814 Colleges & Units
$3,317,473 University Cost Recovery

REVENUE (IN MILLIONS)
5-YEAR HISTORY

2017 2018 2019 2020 2021
$4.74 $5.35 $4.73 $5.62 $13.85
## Recent Revenue-Generating Portfolio Highlights

<table>
<thead>
<tr>
<th>ErSO</th>
<th>Small Molecule Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>A new approach to treating human estrogen-receptor-positive breast cancers and their metastases in bone, brain, liver and lungs.</td>
<td>Small molecules serving as substitutes for missing proteins to restore function.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Printable Semiconductors</th>
<th>Stacked Nanowire Transistors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stretchable, flexible, and printable electronics.</td>
<td>A design for vertically stacked nanowire transistors for radio frequency electronics that both increases the number of transistors that can be put in a device and decreases signal distortion.</td>
</tr>
</tbody>
</table>
### DEMOGRAPHICS OF INVENTORS WHO DISCLOSED IN FISCAL 2021

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Inventors</th>
<th>Faculty &amp; Academic Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total inventors on 2021 disclosures*</td>
<td>530</td>
</tr>
<tr>
<td></td>
<td>UIUC inventors</td>
<td>433</td>
</tr>
<tr>
<td></td>
<td>UIUC inventors who self-reported gender and race**</td>
<td>293</td>
</tr>
<tr>
<td></td>
<td>Female UIUC inventors</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>URM UIUC inventors</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Faculty &amp; Academic Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total faculty &amp; academic researchers on 2021 disclosures</td>
</tr>
<tr>
<td></td>
<td>Faculty &amp; academic researchers who self-reported gender and race**</td>
</tr>
<tr>
<td></td>
<td>Female faculty &amp; academic researchers</td>
</tr>
<tr>
<td></td>
<td>URM faculty &amp; academic researchers</td>
</tr>
</tbody>
</table>

*includes faculty, academic researchers, students, staff, and external collaborators  
**self-reported information provided by human resources
## CAMPUS SUMMARY

<table>
<thead>
<tr>
<th>College/Unit</th>
<th>Disclosures</th>
<th>U.S. Patent Applications Filed</th>
<th>U.S. Patents Issued</th>
<th>Licenses &amp; Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus Total</strong></td>
<td>211</td>
<td>216</td>
<td>78</td>
<td>61</td>
</tr>
<tr>
<td>Agricultural, Consumer, &amp; Environmental Sciences</td>
<td>19</td>
<td>12</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Applied Health Sciences</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Beckman Institute for Advanced Science and Technology</td>
<td>18</td>
<td>22</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Carl R. Woese Institute for Genomic Biology</td>
<td>16</td>
<td>29</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Carle Illinois College of Medicine</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engineering</td>
<td>126</td>
<td>128</td>
<td>50</td>
<td>29</td>
</tr>
<tr>
<td>Fine &amp; Applied Arts</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Liberal Arts &amp; Sciences</td>
<td>39</td>
<td>70</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>National Center for Supercomputing Applications</td>
<td>6</td>
<td>1</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Note:** Due to the large amount of interdisciplinary research on campus, inventions are often associated with more than one college or unit. As a result, the numbers reported in the table above may be counted multiple times, once for each associated college or unit.