License Income

License Income Earned

<table>
<thead>
<tr>
<th>License Income ($ Millions)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenue:</td>
<td>28.0</td>
<td>27.5</td>
<td>44.1</td>
<td>50.6</td>
<td>34.6</td>
</tr>
</tbody>
</table>

Total Revenue: $34,605,237
Patent Reimbursement: $523,486

Income Distribution

- University Share: $22,822,112
- Creator Share: $7,644,649
- Unit/College Share: $3,506,034
- Collaborators' Share: $48,978

Note: Distributions may not match license income received due to the time lag between the date income is received and the date distributed.

Innovation Snapshot

Top 3 Innovations by License Income
- **Shingrix**: A new, FDA approved shingles vaccine with 90% effectiveness
- **Tice BCG**: The top non-invasive bladder cancer treatment and prophylaxis
- **Dronabinol**: Newly formulated, oral pharmaceutical treatment for obstructive sleep apnea.

Licenses

- Total Active Licenses FY21: 322
- Total Issued Patents Worldwide: 655
- New Start-ups founded in FY21: 35
- SBIR/STTR Awards: $20.3 M
- Seed and Venture Capital Funding: $17.5 M

Innovations

<table>
<thead>
<tr>
<th>College/Unit</th>
<th>Technologies Disclosed</th>
<th>U.S. Patents Filed</th>
<th>U.S. Patents Issued</th>
<th>Licenses &amp; Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>141</td>
<td>106</td>
<td>25</td>
<td>45</td>
</tr>
</tbody>
</table>

- **Applied Heath Sciences**: 2
- **Architecture and the Arts**: 3
- **Business**: 4
- **Dentistry**: 41
- **Engineering**: 4
- **Innovation Center**: 4
- **Law**: 1
- **Liberal Arts & Science**: 12
- **Medicine (UIC, Rockford, Peoria)**: 63
- **Nursing**: 1
- **Pharmacy**: 24
- **Public Health**: 1
- **Social Work**: 0

Note: Campus research is interdisciplinary; technologies can be associated with multiple colleges.
### Chancellor’s Translational Research Initiative (CTRI)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinay Aakalu</td>
<td>Peptide Treatment of Corneal Wounds</td>
</tr>
<tr>
<td>Kamran Avanaki</td>
<td>BGscope: A Non-Invasive, Continuous Blood Gas Measurement Device</td>
</tr>
<tr>
<td>Luisa DiPietro</td>
<td>Novel NRF2 Activators as Wound Healing Therapeutics</td>
</tr>
<tr>
<td>Peter Gyarmati</td>
<td>Point-of-Care Detection of Bloodstream Infection</td>
</tr>
<tr>
<td>Xin Huang</td>
<td>Developing RT-LAMP Assays for the Detection of SARS-CoV-2 in Saliva</td>
</tr>
<tr>
<td>Sangil Kim</td>
<td>Development and Commercialization of a Low-Cost and High-Performance Blood Separation Device for Diagnostics</td>
</tr>
<tr>
<td>Deepak Shukla</td>
<td>Repurposing PBA as a Potent Anti-Herpes Agent</td>
</tr>
<tr>
<td>Meenesh Singh</td>
<td>Sensor-Integrated Microfluidic Device for Automated Screening of Active Pharmaceutical Ingredients</td>
</tr>
<tr>
<td>Peggi White</td>
<td>JP Wound Drain Holder Device</td>
</tr>
<tr>
<td>Xiaohong Joe Zhou</td>
<td>Method for Producing 3D Magnetic Resonance Images with Reduced Field-of-View</td>
</tr>
</tbody>
</table>

### UIC Chancellor’s Innovation Fund

**Proof of Concept (POC) Phase I**

- **Paul Goldspink**
  - Targeting 14-3-3/Troponin I in Cardiomyopathy
- **Russell Pesavento**
  - Coated Nanoceria as a Caries Prevention Agent
- **Justin Richner**
  - Dengue Virus mRNA Vaccine
- **Fein Song and Jeffrey Loeb**
  - GlyB4 Biologic for Neurodegenerative Diseases
- **Alexander Yarin and Youngkwan Song**
  - Medical Device-Related Pressure Injury Prevention

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Lee Alkureishi (UIC)</td>
<td>and Russell Reid (UChicago)</td>
</tr>
<tr>
<td>Bending the Bone –</td>
<td>Developing 21st Century Tools for Bony Manipulation in the Operating Room</td>
</tr>
<tr>
<td>Xincheng Yao (UIC)</td>
<td>and Tiffany Schmidt (NU)</td>
</tr>
<tr>
<td>Functional Optophysiological Mapping of Intrinsically Photosensitive Retinal Ganglion Cells</td>
<td></td>
</tr>
</tbody>
</table>

### Chicago Biomedical Consortium (CBC)

**Funded Catalyst Awards**

- Karla Satchell (NU), Vadim Gaponenko (UIC), and Viresh Rawal (UChicago)
  - Covalent Inhibitors of the Nsp16\(^{2’-O\text{-Methyltransferase of SARS-CoV-2}}\)
- Evan Scott (NU), Ying Samuel Hu (UIC), Melody Swartz (UChicago), and Jeffrey Hubbell (UChicago)
  - Novel Strategies for Enhancing Vaccine Efficacy Against SARS-CoV-2
- G. R. Scott Budinger (NU), Jing Liu (UIC), and Gokhan Mutlu (UChicago)
  - Targeting Aberrant Immune Responses in Patients with Severe COVID-19

### COVID-19 Research & Commercialization Awards Received

- **Technology/Therapeutic Development Award from the U.S. Department of Defense Health Program, Congressionally Directed Medical Research Programs**
  - Yulia Komarova
    - Novel Pharmacological Interventions for ARDS of COVID-19 Patients: Investigational New Drug-Enabling Studies: $5.9M

- **Chicago Coronavirus Assessment Network (Chicago CAN) Initiative from the Walder Foundation**
  - Charlie Catlett and Rachel Poretsky (DPI)
    - Chicago Prototype Coronavirus Assessment Network Node (PCANN): $1.25M

- **Renee Taylor and Nahed Ismail**
  - Chicago Can Beat COVID-19: Investigating the Efficacy of a Novel Self-Testing Approach and Persuasive mHealth Technology in an Underserved, Community-Based Sample: $1.2M
Office Highlights

Social Impact Initiatives
UIC OTM is focused on supporting social impact research conversion to community impact. To facilitate this OTM has focused on non-exclusively licensing our social impact programs to community organizations, non-profits, strategic partners and startups for minimum financial return.

OTM has recently expanded its initiatives to develop a social entrepreneurial ecosystem within UIC to support high social impact endeavors across the campus. These initiatives will focus on connecting UIC social entrepreneurs and researchers with outside funding, identifying and setting up partnerships with external entities to scale up and operationalize our existing social impact programs, and identifying new programs to enhance the social impact.

COVID-19
UIC OTM remained committed to helping faculty to advance the commercialization of UIC research during the COVID-19 pandemic. To facilitate this, OTM granted funding extensions for the DPI and CTRI awards and delayed the POC LOI. OTM inventor meetings, workshops, and license negotiations were successfully converted to a virtual platform and did not impact our ability to host events including the annual POC pitch day and workshops on entrepreneurship.

Throughout the COVID-19 pandemic
UIC and UI Health faculty rapidly pivoted their research to address the paramount need for adequate epidemiologic tracking tools, diagnostic tests, personal protective equipment (PPE), therapeutics, and ventilatory support devices and accessories. During this time, UIC OTM received 17 new technology disclosures and pivoted 3 existing technologies to track, prevent, diagnose, and/ or treat COVID-19 and its comorbidities. Many of these technologies have received industry interest, developed into companies, received internal and external funding to advance the technology, and/ or been featured in UIC Today and other publications. Some of these notable faculty initiated technologies include:

Vikas Berry
COVID-19 Detection via Graphene Plasmonics

J. Hussain, Y. Leiderman, P. Pfanner, A. Sahni, and D. Schaumann
NIPPV Seal Clip / Chicago Clips for Noninvasive Helmet Ventilation

Mohammad Islam (UIC) and Erik Procko (UIUC)
ACE2 Decoy Receptor Binds SARS-CoV-2 Spike (S) Protein with Tight Nanomolar Affinity

Sandeep Jain (Advaite)
RapCoV™, Diagnostic Test for COVID-19

Yulia Komarova
Novel Drug-Based Therapy to Treat ARDS Associated with COVID-19

Asrar Malik (UIC) and Erik Procko (UIUC)
Therapeutic Efficacy of Engineered ACE2 Peptides in Experimental in Vivo Disease Models of COVID-19

Igor Paprotny
Real-Time Detection of Airborne COVID-19 Using Hybrid Microfluidics

Graziano Pinna
Allopregnanolone May Be Beneficial to Treat COVID-19 Symptoms

Bellur S Prabhakar
Treatment or Prevention of SARS-CoV-2 Infection Using (S)-Crizotinib

Rui Xiong
Novel SARS-CoV-2 PLpro Inhibitors as Potential Treatment for COVID-19 Pandemic

Therapeutic and Vaccine Pipeline

- PRECLINICAL
  - 19
- PHASE I
  - 5
- PHASE II
  - 7
- PHASE III
  - 2
- REGISTRATION
  - 1
- MARKET
  - 6
- TICE BCG
- Shingrix
- Phexxi