

Office of Technology Commercialization

2019 Annual Report

Theory, Practice and Impact From WPI Innovation

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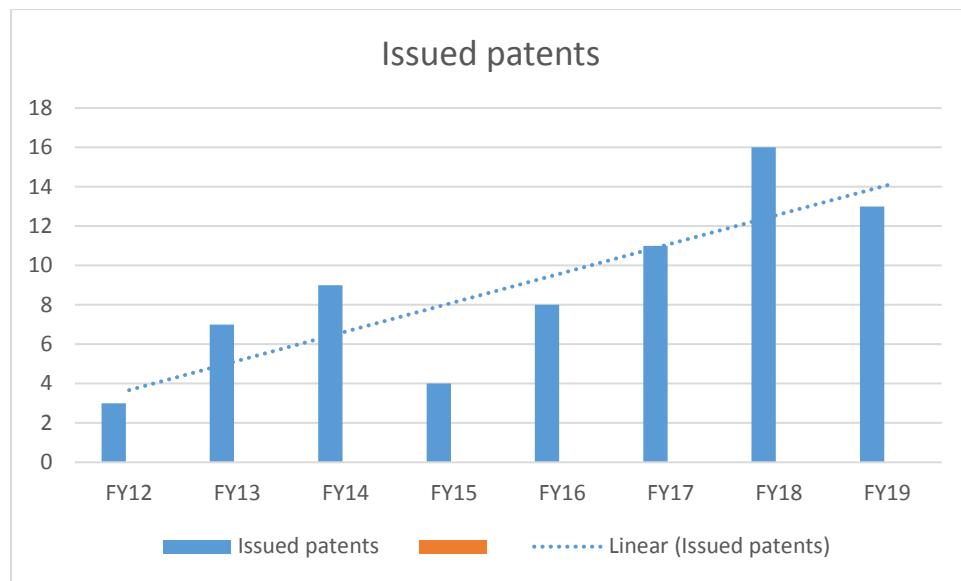
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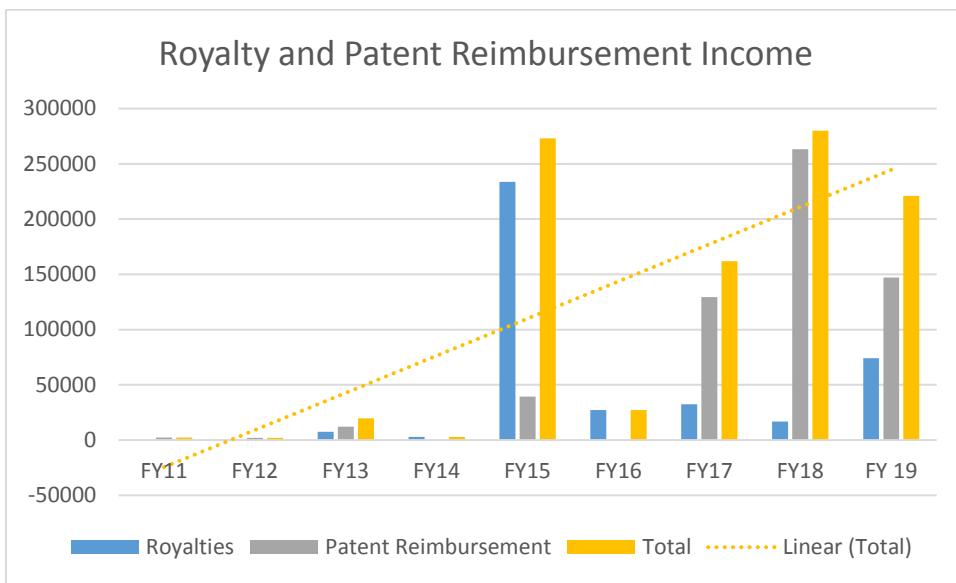
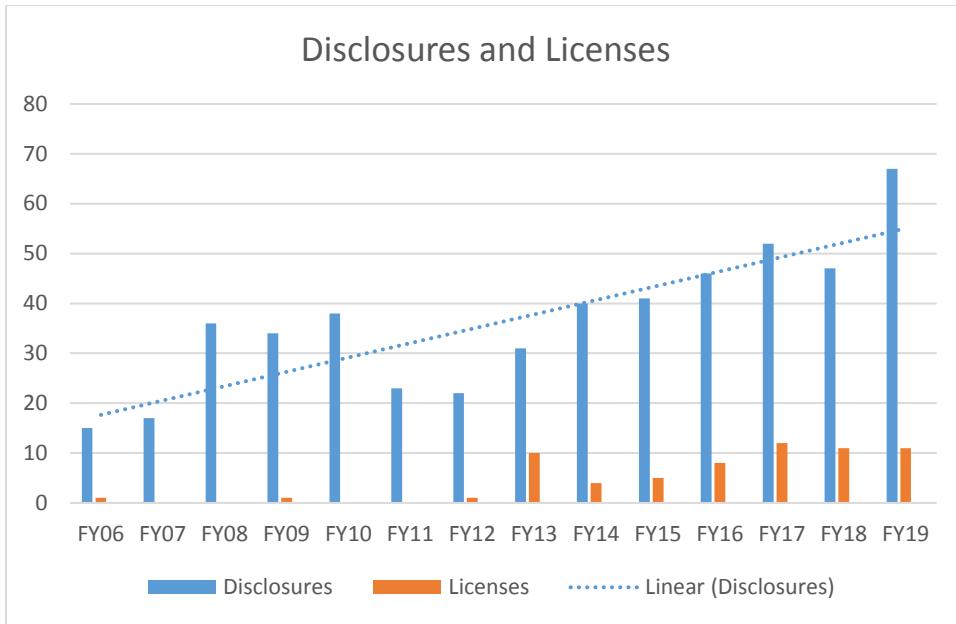
The **Value Proposition** of the Office of Technology Commercialization (OTC) is to accelerate the transfer of WPI discoveries from the lab to the market for the benefit of society on a local, national and global basis.

In addition to accelerating ideas on a commercial pathway via licensing of Intellectual Property (IP), the OTC serves to

- a) Help recruit and retain entrepreneurial faculty
- b) Stimulate and educate students in the IP and Commercialization process
- c) Promotes local economic impact with the jobs created and money raised by WPI spin-out companies

Here is the trending activity at a glance:



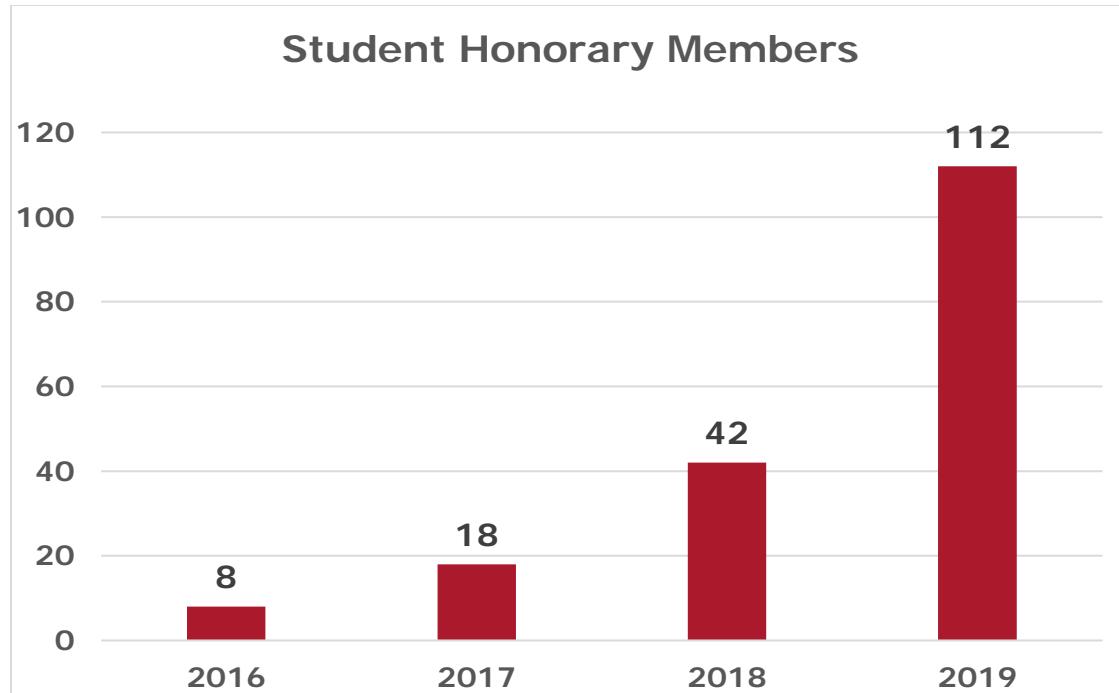




The trends of disclosures and licenses, including startups continues to be strong. There is an even stronger pipeline of licenses for FY 20. Another important trend is that some of the early licenses have begun paying back in the form of patent reimbursement and the beginnings of royalties. WPI had just over \$147,000 in patent reimbursement in FY 19. There is a total of \$125,000 that has been either received or invoiced in the first quarter of FY 20. There was a near record 11 licenses signed in FY 19. There were 5 licenses signed in the first quarter of FY 20. So FY 20 looks strong for OTC at this point.

OTC continues to support faculty, especially new faculty who are coming from very large institutions and expect a fully operational, efficient technology transfer program. An ever increasing percentage of faculty interact with OTC across all research disciplines.

OTC also stimulates and educates WPI students on the IP and commercialization process. WPI's National Academy of Inventor's Chapter acknowledges students who have applied for a patent at its annual meeting in May. Here is the trend in student members.



As is the trend across the US, WPI is seeing more licensing activity to startups. Larger companies have become more risk adverse to early stage technologies coming out of academia. Therefore, the only way for schools to “bridge the valley of death” is to start up a company, reduce the risk, and then be merged with a larger company. As can be seen from the above chart, there are now 18 startup companies that have been formed as a result of a WPI license, or an investment from the WPI Commercialization Fund. 16 of the 18 are in Massachusetts, with most in the greater Worcester area. Several of these companies are now raising significant rounds of funding to accelerate growth and expand their workforce.

WPI’s National Science Foundation I-Corps Site completed its first year. The fall cohort for FY 20 has begun with 10 more teams and there is already a list of interested teams for the winter cohort.

I-Corps Program

Pilot program – 5 teams per year for 2 years
Paid from Commercialization Fund

I-Corps Site program
22 Teams in two cohorts in FY 19
\$3000 to get out of the building and talk to customers
Minimum 30 customer interviews over 8 week period
\$255,000 for three years, expect to be self funding after that

NSF

Worcester Polytechnic Institute

OTC has been able to expand its marketing capabilities by hiring Sarah Mahan as the new Licensing Associate. Sarah had run the Tech Advisors Network (TAN) program for 6 years prior to joining OTC. She will be able to use her network to help get commercial feedback on new IP emerging. New disclosure activity has tripled in the last 5 years and the Licensing Associate will help keep up with screening those with the best commercial potential in order to prudently invest the patent funds available. She will also help expand the TAN IP evaluation network, which are alumni across the country that have commercial experience and can provide feedback on new IP that has been filed to help determine which ones WPI should continue to invest in.

OTC reviewed the WPI IP policy and compared to peer schools around student IP ownership. WPI already one of the most generous splits with faculty in the country with its 50/50 split policy. There has been a perception among some students that WPI takes ownership of their intellectual property if they use significant WPI resources. WPI actually has the most liberal policy towards student inventions by offering to give it to them if they would like to go on their own and pay for the patent expense. WPI will still provide the same resources to

have them be successful even if WPI doesn't have a financial interest. Here is what other schools share if students invent at their schools:

| School | WPI | Stanford | M.I.T. | CMU | RPI |
|---------------------|------|----------|--------|-----|-----|
| % owned by students | 100% | 33% | 26.5% | 50% | 35% |

WPI is implementing "Gompei's Circle" which would say to those going the 100% route (in addition to anyone going through WPI) the chance to join Gompei's Circle.



This program has been met with a lot of enthusiasm and there is a waiting list of those who will commit once the program is up and running.

WPI Commercialization Fund

The WPI Commercialization Fund began in November, 2012. The fund has raised over \$550,000 in donations as well as internal WPI funds. \$446,000 has been invested in 11 projects. An additional \$15,000 was used to pilot WPI's I-Corps program prior to getting the NSF grant. 3 of the companies that received

investments are now defunct. 6 companies are active and 2 of those received follow on funding.

Here are the links to the active companies:

Blustream Corporation: <https://blustreamcorp.com/>

Battery Resourcers: <https://www.batteryresourcers.com/>

Datanomix: <https://datanomix.io/>

AiM Medical Robotics: <https://www.f6s.com/aimmedicalrobotics>

Lumikha 3D: <https://www.lumikha3d.com/>

Fuse Audio, LLC: site under construction

Several of these companies are in the midst of some major fundraising at much higher valuations. Advancement has committed to adding more to the fund so investments can accelerate as the portfolio of candidates grows. The fund is an evergreen fund, so proceeds from investments will eventually make the fund grow even further to put more funds to work to accelerate the growth of WPI technologies.