

Technology Licensing Office

The mission of the [Technology Licensing Office \(TLO\)](#) is to move innovations and discoveries from the laboratory to the marketplace both to benefit the public and to amplify MIT's global impact. Although its mission remained steady, fiscal year 2017 was a year of immense change at TLO. A new director, Lesley Millar-Nicholson, joined the office, and reviews of TLO's processes and practices resulted in the adoption of new administrative approaches. TLO had to do an unusual amount of hiring to replace 14 staff members, and the office also had to face the unexpected and tragic loss of a key member of the staff, Rolande Johndro. Despite the difficulty of some of these changes, TLO's engagement with MIT faculty and researchers, licensees, and other stakeholders continued to demonstrable effect.

The TLO staff of 43 (22 licensing professionals and 21 administrative and support personnel) is responsible for working closely with faculty members and researchers to identify marketable technologies, to manage patent applications and copyright registrations, to find licensees to develop the technologies (including start-up companies founded to develop the technologies), and to negotiate licenses. The office manages the protection and licensing of MIT's trademarks and the use of the MIT name. An additional and significant responsibility is assisting the Office of Sponsored Programs in the negotiation of the intellectual property terms in nonfederal research sponsorship agreements.

Over the course of the year, with input from TLO staff and various stakeholders, Director Millar-Nicholson set forth a vision of new approaches in a number of areas. These, which will play out in the coming years, include:

- Improved transparency and consistency in TLO licensing practices
- Increased communication highlighting the technologies available for licensing and the launch of a new TLO website
- Strategic management of technology portfolios and standardization of agreements
- Reduced transactional costs of intellectual property (IP) management and commercialization through replacement of the TLO database and other improvements to practices
- Enhanced educational sessions for faculty, students, and staff
- Increased collaboration with [innovation ecosystem](#) partners
- Introduction of an annual TLO retreat and of goal setting and performance reviews for all staff

The volume of new technology disclosure forms that TLO received in FY2017 was stable (794, compared with 800 in FY2016); Lincoln Laboratory contributed another 84 (compared with 82 in FY2016). The office spent \$21.62 million to protect MIT's IP in

FY2017. Total reimbursement of previously incurred patent costs by licensees was \$10.68 million (49%). During FY2017, 298 US patents were issued to MIT. Overall, in the MIT patent portfolio there are 2,679 issued, and 1,551 pending, US patents. Approximately 50% of issued US patents and 31% of pending US patents are licensed.

The office's FY2017 licensing and patenting activity included the following:

- 101 licenses and 36 options executed, a slight increase from the previous year
- More than 150 active trademark licenses, yielding \$251,000
- A steady stream of new companies, with 25 start-ups obtaining licenses
- Five licenses and five option agreements completed for Lincoln Laboratory technologies
- Receipt of equity as part of license consideration in 10 of the 25 start-up licenses
- New technology licensed to 10 start-up companies formed in earlier years
- More than 50% of the FY2017 licensed start-up companies were based in Massachusetts, 24% were based in other US states, and 24% were international companies
- Launch of a ready-to-sign initiative for end-use software licenses, resulting in 57% of such licenses (approximately 20) going through the TLO website
- An established pipeline of more than 143 license negotiations under way at the end of FY2017 by senior licensing staff, with 50% of those negotiations with start-up companies

Gross TLO cash income in FY2017 was \$53.66 million, compared with \$61.95 million in FY2016. Of that income, \$20.9 million (39%) can be attributed to a range of technology areas, including a \$10 million residual from now-expired digital TV licenses. Of 493 active, revenue-generating licenses, just six generated more than \$1 million in FY2017; another four licenses generated more than \$500,000. Revenue from liquidated equity received in consideration for licenses in prior years was \$5.62 million.

In FY2017, more than \$31 million from royalties earned in FY2016 was distributed to MIT-related entities, such as inventors, departments, laboratories, centers, and the general fund; \$0.4 million was distributed to the Whitehead Institute. As always, most of the income resulted from patents that had been filed and licenses signed 5 to 10 years before.

Total research expenditure for MIT in FY2017 was \$1.69 billion. TLO staff worked closely with the Office of Sponsored Programs in the negotiation and management of IP terms in nonfederal research and collaboration agreements, and in alliances (industrial, foreign governments, and philanthropic foundations).

The office's staff are also active contributors to various student activities and to entrepreneurial programs at MIT. In FY2017 these included judging in the "100K"

student business plan contest, and guest lectures on patents and licensing in a number of engineering classes and courses at the Harvard-MIT Division of Health Sciences and Technology and the Sloan School, both undergraduate and graduate. Staff also provided open-door coaching for students thinking of starting a business, whether through an MIT license or not. TLO staff also participate actively as advisors at the Deshpande Center for technological innovation and in the [Venture Mentoring Service](#).

Members of the TLO are actively involved in disseminating MIT technology transfer and entrepreneurship policies and practices to other universities, research institutes, and governments throughout the world. TLO senior staff have served, usually *pro bono*, as advisors to more than a dozen university or governmental technology transfer offices in a number of countries. The TLO also hosts dozens of visits from other such organizations, government agencies, other universities, and corresponding company departments on a regular basis. Senior TLO staff also served *pro bono* on the boards or senior committees of a number of national, state, and local entrepreneurial and technology transfer organizations.

Lesley Millar-Nicholson
Director