Overview of The PCI Fellows Program

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1. Summary

The PCI Fellows program is a highly successful experiential educational program in technology commercialization for graduate students and postdocs.

PCI Fellows are trained in a series of workshops on intellectual property protection, prior art search, market research, and writing techniques for technology research. Fellows are mentored by actively participating in PCI’s day-to-day activities.

Since its inception in 2008, the PCI Fellows program has trained over 100 Fellows and has become a model for similar programs in university technology transfer offices across the country. Many PCI fellow graduates now work in technology commercialization areas, including IP Law Firms, consulting firms, startups, and other university technology transfer offices.

The founder and director of the program, Tomás Isakowitz, has 20+ years’ experience in technology and business. Prior to PCI, Dr. Isakowitz occupied senior positions in equity research at several Wall Street firms. Before that, Isakowitz was faculty in Information Technology at NYU’s Stern School of Business.

1. Program Structure

The PCI Fellows program is only open to persons with an active UPENN affiliation as a graduate student, post-doc, or researcher. We do not accept individuals from institutions other than UPENN.

Fellows commit to staying for 14 months; many stay for longer. A fellow has to be on campus during that time (with exceptions for vacation, work-related travel, and the like).
1.1. Applying to the program

The application window is as announced on the web site. Applicants are rigorously screened and interviewed. The acceptance rate varies but is generally around 40%. The program starts with an initial training (see below). The program accepts 10 to 13 new Fellows every year.

1.2. Training

The training program consists of a lecture-style Initial training workshop followed by a regular mentorship period and mandatory monthly face-to-face meetings (usually 4-5 pm on the 3rd Monday of every month).

- **Jr. Fellow status:** Incoming fellows enter the program as Jr. Fellows and stay as such during their training, which typically lasts three months (completion of six projects). At the end of the training period, Jr. Fellows are evaluated on their performance. Those that complete the training successfully are promoted from Jr. Fellows to Fellow. Those that do not leave the program.
- **Initial training workshop:** the goal is to get fellows started. Consists of three half-days covering IP, prior art search, and working on projects.
- **Mentorship:** starting with the initial training, mentors (Sr. Fellows) are assigned to incoming fellows for their first six assessments, about three months. The mentors review fellows’ work and provide guidance.
- **Monthly Fellow meetings:** the goal is to provide an opportunity for ongoing training, enable networking, and keep morale up. The meetings are in-person and mandatory. They are held at PCI and occur once a month, usually 4-5 pm on the 3rd Monday of every month. In these meetings, we review issues from the preceding period and provide additional training, such as market research, in-depth prior art search, and guest speakers’ presentations.

1.3. Required Time Commitment

Fellows are expected to be available to work 10 hours per week and are not allowed to work more than that. Most work can be performed remotely and hence does not require physical presence. As explained above, fellows are also required to attend in-person the monthly Fellows Meeting.
There is substantial flexibility in terms of when the work is performed. There are, however, strict
time requirements on a project-by-project basis. Each project has a predetermined timeline, and
fellows are expected to complete the projects within that timeline. For example, most projects
are expected to be completed within 10 days of the assignment date.

1.4. Pay

PCI Fellows are compensated monetarily for their work. All payments are project-based. Each
project has a determined payment structure. In 2020, Invention Assessments are valued at $90
and Marketing Assessments at $70 (see these projects’ descriptions further below). The
payment structure may change in the future.

1.5. Senior Fellows

Fellows that have been in the program for more than one year qualify to apply to become Senior
Fellows. Besides, to the task performed by Fellows, Sr. Fellows become mentors for the next
cohort of PCI Fellows. Mentoring responsibilities include developing and delivering educational
materials, support Junior Fellows while in training, and additional tasks that involve a mature
understanding of PCI operations. Sr. Fellows are required to dedicate the same number of
weekly hours (10).

2. PCI Fellows Projects

2.1. Internal PCI process

To properly frame the projects performed by fellows, it is necessary to understand the UPENN
technology transfer process. This process is dictated by the University Patent Policy, which
states that Inventors (students, faculty, etc.) must disclose their inventions to PCI. Specifically,
“INVENTORS shall file INVENTION DISCLOSURES for all INVENTIONS covered by the
PATENT POLICY promptly with the PENN CENTER FOR INNOVATION (PCI) at the University.
PCI shall direct the review and management of the INVENTIONS.” As a result, PCI receives
about 360 disclosures yearly, about one a day.

Every disclosure is assigned to a Technology Licensing Officer (TLO), who is in charge of
managing its commercialization proves. As an initial step, the TLO may request a Fellow
Invention Assessment (see below), which will be used to inform the decision to patent the
technology at the university's expense. If a patent is filed, the TLO will proceed to market the
technology, and as part of that, PCI Fellows will be tasked with writing marketing materials. The
subsequent process typically does not involve PCI Fellows: the TLO will use their network and marketing materials to reach out to potential licensing, and in many cases will negotiate a license agreement with a company. The agreement contains clauses that dictate company payment. Typically, the payments fall in these categories: initial when the agreement is signed, a milestone when certain key developments occur (clinical trial progress, fundraising, etc.), and royalty when sales occur. This is a brief description of the overall process, which includes many additional steps.

2.2. Initial Invention Assessments

TLOs typically request an Initial Assessment for 50% of the disclosures. The main purpose of this type of project is to help assess the patentability of an invention. These reports focus on two key aspects:

- define the invention, including a summary
- evaluate patentability

Performing this type of project provides hands-on training of performing prior art searches, which are fundamental to the patenting process. These require a good understanding of patents and of the requirements an invention must satisfy to be patentable.

The amount of time it takes a Fellow to complete this type of project varied from Fellow to Fellow. It is typically 5 to 10 hours for a fully trained fellow and 10 to 20 hours when a fellow first starts the program.

2.3. Marketing Assessments

Once PCI has decided to file a patent, TLOs engage in a commercialization process. As part of that Fellows prepare Non-Confidential Summaries, which are posted online and sent to prospective licensees. Some of these summaries can be browsed online.

A Non-Confidential Summaries comprises a description of the problems solved by the technology, the solutions it provides, and how the technology works.

A Marketing Assessment will typically take a fully trained fellow 4 to 6 hours.
2.4. **Difference Between the Types of Assessments**

While an Invention Assessment focuses on confidential information to assess patentability, Non-Confidential Summaries focus on the opposite, meaning that key elements of inventions are not divulged less they hamper the ability to patent them. Furthermore, while Invention Assessments are meant to be read by IP professionals, the audience for Non-Confidential Summaries is business development individuals with the purpose of generating licensing deals.

2.4. **Special projects**

From time to time, fellows are asked to work on projects that do not fall under the above categories, but are part of technology commercialization and innovation activities. Examples include: performing reviews of technology portfolios, preparing training materials for new fellows, reviewing publications to identify potential inventions, tracking the status of the project pipeline, and providing teaching assistance for Penn I-Corps courses.

3. **Fellow Prospects Beyond the Program**

Over 100 fellows have been trained by PCI. These are the types of professions they typically move on after the program:

- **IP Law (30%)**: typically starting as scientific advisors many go on to complete law degrees and become partners
- **Technology Transfer (25%)**: there are numerous TT office across the country, ad former fellows are Licensing Officers at some of them
- **Consulting (35%)**: Fellow training is valuable to consulting firms (e.g., BCG) who leverage their scientific insights, understanding of IP, and communication skills.
- **R&D (10%)**: returning to R&D, be in academia, in industry, or in a startup, is another option. The experience gained through the PCI Fellows program enables positioning and directing their research for successful commercialization.