

***UTEN / MIT Workshop #2***  
***Experiencing Technology Transfer & Commercialization:***  
***Fostering a New Dialogue with MIT***  
***IST – March 29-31, 2009***

The University Technology Enterprise Network (UTEN) in collaboration with the MIT | Portugal Program and the Foundation for Science and Technology (FCT) held the second of a series of UTEN workshops scheduled throughout 2009. Workshop #2, Experiencing Technology Transfer & Commercialization: Fostering a New Dialogue with MIT, was hosted by Instituto Superior Técnico, March 29-31, 2009 and structured into three parts:

- Stimulating Knowledge Creation and Entrepreneurial Activities: Community, Research, and Education
- Building and Supporting Entrepreneurial Activity and Academic-Industry Collaboration
- Reaping the Benefits of Knowledge Creation: Managing and Negotiating Research Sponsorship, IP Licensing, and Consultancy

UTEN Workshop #2 brought together a diverse group of talent and experience levels from the Portuguese technology commercialization community to exchange ideas, establish connections, and continue the UTEN workshop series. Portuguese workshop participants were selected to cover a range of technology transfer officer and entrepreneur experience levels and needs from UTEN's nationwide network of 15 Portuguese universities, technology parks, and incubators as well as select Portuguese intellectual property (IP) professionals and civil servants. The objectives were to share MIT's experiences, train and mentor less experienced attendees, and encourage cross-group communication and learning among all Portuguese participants.

The workshop included a series of presentations by MIT and Portuguese faculty and staff as well as interactive discussions sessions. The main topics and speakers were:

- Leveraging the Discovery Process @MIT: Stimulating the Faculty for Knowledge Creation and Technology Transfer (Cooney, Mendes)
- Policies to Facilitate the Set-up of University Spin-offs: the Experience of INESC-Porto (Caldeira, Nelsen)
- Critical Success Factors in High Tech Entrepreneurship: What's Hot and What's Not--Creating and Supporting Entrepreneurial Opportunities for the MIT Community (Morse, Barreiros)

- Managing Research and Challenges for Industry- Science Relationships in the Software Industry: the Experience of Outsystem (Rosado, Morse)
- Moving Knowledge Out of Academia for Commercialization: Licensing Practices and Tools (Part I--Nelsen, Cunha)
- Moving IP from Universities to Spin-offs: A Smooth or Bumpy Road--The Case of Problad@Inovisa, UTL (Monteiro, Cooney)
- What Companies Really Value in Their University Relationship: A Perspective from MIT (Koster, Ferreira)
- Industry-Academia Successes @ MIT: Examples of Beneficial Activities Resulting from Industry Interaction on Campus (Knopp, Costa)
- Promoting Foundation Support for Universities: MIT Examples and Best Practices (Oldham, Machete)
- Connecting Innovators to the Business Community: Incentives, Mechanisms, and Support Structure @MIT (Cooney, Pissarra)
- Moving Knowledge Out of Academia for Commercialization: Licensing Practices and Tools (Part II--Nelsen, Anamorim)
- Valuing Faculty Know-How through High Tech Start-Ups: The Case of Critical Materials and Its Relation with University of Minho (Dias, Cooney)

To learn more about forthcoming and past UTEN workshops please refer to [http://www.mctes.pt/archive/doc/UTEN\\_2.pdf](http://www.mctes.pt/archive/doc/UTEN_2.pdf) .

## **Executive Summary of Participants' Assessments of Workshop #2**

To improve future workshops, UTEN staff administered an electronic survey to solicit feedback from participants. Thirty-seven of 47 potential workshop participants answered all or part of the survey. Slightly more than half of the respondents represented technology transfer offices, with smaller numbers of entrepreneurs and incubator directors/managers. Nearly half of the respondents had six or fewer years of experience. Participants were most interested in technology transfer and commercialization, followed by intellectual property and entrepreneurship.

Nearly three-fourths (73%) of the respondents said the workshop sessions were extremely or quite useful. More than half (51%) of the participants said their expectations had been

far exceeded or exceeded, and 42% said their expectations had been met. More than four in five (84%) reported that they were interested in attending a more advanced training session on selected workshop topics.

Over 90% of respondents felt positively about the opportunity to network with others. Respondents also were very positive about the structure of presentations and discussions as well as the use of cases as a method of presenting information. Nearly all attendees said the workshops provided new information to them and that they would be able to use the workshop information in their jobs. A large majority of respondents also felt workshop registration and administration were good, workshop objectives were clearly stated, the length of the workshop and number of participants were appropriate, and the workshop would help strengthen technology transfer capabilities.

In terms of improving their own skills, more than one-quarter (27%) said the sessions were extremely useful while 29% thought the sessions were very useful. One in five felt the sessions were useful and a similar number felt the sessions were somewhat useful.

In summary, individuals who responded to the survey about the UTEN | MIT (IST) workshop were very positive about all aspects of the event.

## **Detailed Response Information for Workshop #2**

### **Respondents**

Overall, 37 of 47 potential respondents provided some information, with 33 providing nearly complete responses. Slightly more than half of the respondents were university officials in technology transfer offices or GAPIs, with smaller numbers of entrepreneurs and incubator directors/managers.

Respondents were tilted to being early in their careers: almost half had six years or fewer of experience, with smaller numbers of respondents having seven to ten years of experience, and more than 10 years of experience.<sup>1</sup> Most respondents were primarily interested in technology transfer and commercialization, with half as many attendees expressing interest in intellectual property and entrepreneurship. Only a small number (1 of every 6) had a primary interest in capital sourcing.

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<sup>1</sup> A sub-group analysis was performed, with the variable *years of experience*, to determine if respondents with 1-6 years of experience had substantially different views than those with more years of experience. There was essentially no variation in views across the two groups.

### **Sessions**

Evaluations for sessions on both days of the workshop were very favorable. Nearly three-fourths (73%) of the respondents said the sessions on the first day were extremely or quite useful and another 20% said they were useful. On the second day, the same proportion of respondents said the sessions were extremely or quite useful and everyone else said they were useful. The two panels on “Moving Knowledge Out of Academia for Commercialization: Licensing Practices and Tools” were the most highly rated. Other very highly rated sessions were: (a) Critical Success Factors in High Tech Entrepreneurship: What's Hot and What's Not--Creating and Supporting Entrepreneurial Opportunities for the MIT Community; (b) What Companies Really Value in Their University Relationship: A Perspective from MIT; and (c) Connecting Innovators to the Business Community: Incentives, Mechanisms, and Support Structure at MIT.

### **General Characteristics of the Workshop**

Over 90% of respondents felt positively about the opportunity to network with others. Respondents also were very positive about the structure of presentation and discussants, using cases as a method of presenting information, their ability to use workshop information in their jobs, and that the workshop provided information new to them. A large majority of respondents also felt workshop registration and administration were good, workshop objectives were clearly stated, the length of the workshop and number of participants were appropriate, and the workshop would help them strengthen their technology transfer capabilities. Approximately 85% of the respondents thought the moderated discussion sessions were useful, while 67% felt having discussants immediately after the presentations was useful in bridging the gap between Portugal and the US. Respondents believed that the amount of discussion time was reasonable.

### **General Characteristics of Presenters**

All of the respondents strongly agreed or agreed that the presenters communicated useful information effectively, were well prepared and experienced, seemed genuinely interested in teaching in the workshop, encouraged everyone to ask questions and express their ideas, and were accessible to participants during the workshop. About 85% of respondents thought the presenters increased their knowledge and competence in the subjects of this workshop, and slightly more than half said the presenters inspired them to think more about the content of the workshop than what was required.

### **Expectations, Skills, and Personal Benefits**

Two questions solicited information about how the workshop might benefit individuals through skill development/enhancement. Respondents were asked to rate the workshop on a 1 to 10 scale along the following dimensions: professional value to you, value to your department/university, value to your company/organization, and educational or economic value to Portugal. Respondents were asked to provide a rating for each of the four dimensions in terms of two timeframes: immediate; long-term. Uniformly the workshop was considered more valuable for the long-term than for the immediate

future—on each dimension (professional value, value to your department, etc.) respondents ranked the long-term dimension higher than the immediate dimension. In terms of the four dimensions, respondents felt the workshop was more useful for its professional value and educational/economic value to Portugal than for their departments or companies.

In terms of improving their own skills, 27% of the workshop participants thought the workshop was extremely useful while 29% thought it was very useful and one in five felt it was useful. About one in five felt it was somewhat useful and a small number did not think the sessions were at all useful. By category of information (technology transfer, intellectual property, capital sourcing, and entrepreneurship), respondents thought the most useful information had been presented on technology transfer, with entrepreneurship and intellectual property being less useful, and capital sourcing information being the least useful.

### **Most and Least Useful Aspects of Workshop/How It Could Be More Useful**

Twenty-four participants provided comments about the most useful aspect(s) of the workshop. Lita Nelsen's presentations were mentioned most often followed by positive comments about MIT's operational issues and best practices, and the opportunity to network.

Sixteen participants provided a variety of comments about the "least useful" aspects of the workshop. Three issues were mentioned by multiple respondents: foundation funding, some discussion sessions, and presentation of information that was inappropriate for the different context in Portugal and Europe.

More than 20 participants provided comments about how the workshop could have been more useful. While the comments were quite diverse, several of the participants noted a desire for more specific and more practical information. Comments included:

*It would be extremely useful if the MIT experts could give more work tools (not just experience and examples)*

*More days with complementary technical workshops to practice some tools/strategies*

*See some TT working tools from MIT*

*Perhaps the presentation of more spin-offs university cases and comments by the team*

*Some more time for discussion and perhaps some "exercises" or "case studies" analysis*

*Hearing some failure cases and try to understand the reasons*

*It was clear that at the moment the technology transfer process at MIT is optimized.... It would have been interested to understand the process that they went through to involve everyone in this mission. It seems to me that it is work that still needs to be done in Portugal.*

### **Future Training Sessions**

Participants left the workshop with a very positive impression. More than half (51%) of the participants said their expectations had been far exceeded or exceeded and 42% said their expectations had been met. As another indication of participants' overall feeling about the UTEN|MIT workshop, more than 84% said they were interested in attending a more advanced training session on the same topics, and all the other participants said they might be interested in attending a more advanced training session. Participants identified technology transfer as their highest priority for a future training session, with intellectual property and industrial liaison also being of interest. Entrepreneurship was a lower priority.

Other topics that respondents would like to see considered for future UTEN workshops are:

*Methodologies for technology market research; tools and procedures to increase KTO's management. Funding KTO's activities.*

*How to operationalize a cooperative national network of tech transfer.*

*VC; BA; Seed Fund; Marketing Plan; Business Plan; Entrepreneurship*

*Study on typical milestones during incubation for startups (for example at MIT) technology assessment*

*Enterprise incubation; entrepreneurship for young people*

*TT models beyond the traditional way; TT through entrepreneurship; social ventures and TT*

### **Additional Comments About the UTEN | MIT Workshop**

A final question solicited other comments. Only a handful of respondents provided opinions, and most were complimentary of UTEN and the workshop. Other pertinent comments are provided below:

*Huge improvement since previous workshop. Congratulations.*

*This workshop exceeded my expectations. However, something concrete should already be scheduled the moment the participants walk out the door in the last day.*

*Please proceed with the GOOD WORK, and CONGRATULATIONS for the work already accomplished! Our guests are doing a very nice effort, sharing with us their (great) experience, it shouldn't be expected (as some times it looks like from some people interventions) from them to find the solutions to our problems, but we should be able to find them ourselves, most probably using our own version from some of the tools and knowledge having been demonstrated by them!!*

*It's very important than Portuguese universities and technological / research organizations prepare professionals on these matters.*

*The workshop could have been better publicized amongst the PhD and DFA students of the MIT Portugal Program.*

Additional participants' comments are presented in the following appendix for:

- Workshop expectations
- How the workshop will benefit employers
- How the workshop will benefit Portugal

## Appendix

### **Select Participants' Comments About Their Workshop Expectations**

Participants provided the following comments in explaining how well the workshop had met their expectations. All are verbatim from the survey responses.

#### *Positive Comments*

I was really interested in learning how MIT dealt with matters involving IP and the information was clearly passed on to us.

I found this workshop more interesting and useful, compared to UTEN workshop number 1

The experience of the MIT TLO was successfully shared by MIT staff. The access to the terms of the organization of main activities and processes of the TLO is quite useful for us as co-workers at the Portuguese KTO's.

I was expecting a good workshop with people from MIT (TLO and ILO) and their presentations were really interesting.

MIT lecturers with excellent knowledge and communication skills, exceptionally accessible and cooperative with participants. The best workshop in Tech Transfer I have attended.

The presenters were very motivated and did a great job, the workshop was well organized and the case studies well chosen.

The presenters and the discussants were able to share their knowledge and expertise as expected

I think it was a very successful workshop mainly because there was an effective intention of communicating a strong knowledge and long experience in technology transfer at the MIT. In addition I must confess that after Texas-Austin workshop I was very skeptical about the utility of these workshops. First category group. Congratulations! Thanks MIT!

I was expecting clear presentations and some use cases. That was indeed what happened.

Although the gap between MIT and my institution, provided me with many new ideas and possibilities

Was very similar to the first workshop in content and perspectives, and the format was more like a class than an interactive workshop.

I've been lucky enough to participate on the WS1 and I knew already the very good level of quality of the event, so I was expecting "more from the same" and I wasn't surprised, since it really met my (and my two subordinates) expectations.

A very experienced MIT team with different contributions and very practical explanations

High expectations; The event provided a good snapshot on how this issue is dealt with at the MIT as a role model

It was important to know a reality that is so different from Portugal and to use this information to build our own module.

I didn't expect such network opening from the MIT staff! Networking meals were great idea!

The MIT's discussants demonstrated a high knowledge about fundamentals questions that all the TTOs have. They present the issues with Portuguese reality in mind.

#### Other Comment

The experience in MIT cannot be repeated in Portugal. Context is very different. I believe we would gain more if we were looking at the Portuguese cases and opportunities. However, this workshop presents a great opportunity for tech transfer offices in Portugal.

### **Select Participants' Comments About How the Workshop Will Benefit Their Employer**

#### Positive Comments

I will be able to help in the process of technology transfer

To understand the long experience of MIT in valorizing knowledge and promoting technology innovation is a good case study to improve our practices in our own work environment. Only positive benefits can emerge from this knowledge and experience.

Learning from a successful experience in TT

Through the application of the knowledge acquired by me in my everyday professional life with new tools and approaches which can be apply to our "clients" (enterprises)

To improve their knowledge on international markets.

I am now aware of many important problems that arise in this field in a far more experienced university. The problems are not different, some solutions are applicable to us, others are not but nevertheless they make me reflect about different ways of solving problems.

Helping establishing an effective structure for TT

Dissemination of new opportunities and promotion on research transfer management.

I could see the "full picture" of tech transfer.

New models / visions on TT

### **Select Participants' Comments About How the Workshop Will Benefit Portugal**

#### Positive Comments

I think, this workshop, and the MIT program in general, is crucial for Portugal to understand the necessity of reformulate the vision on the mission of the Portuguese universities. It was clear in this workshop the importance of doing competitive research able to attract companies and get them involved with universities that will end up in technology transfer and, consequently, effective economic growth (of major importance nowadays).

In long-term, increase competencies at TT offices

Through the sharing of experiences between participants, a dialogue was opened that can lead to a stronger exchange of ideas between countries

Implementation of proven US best practices

Exposing key Portuguese staff to some of the best and most successful practices in the world in this area

Portugal is starting in this field and I think this was a real contribution for a national best practice considering that the main Portuguese universities were represented.

Suggesting new policies on scientific innovation

Providing ambitious guidelines towards an efficient management of TT and entrepreneurship promotion

Increasing the level of competencies and operational quality of related Portuguese Institutions.

It has the potential to improve University-Private sector relations and economic impact of research if lessons are learned and successfully implemented

It is important to see others realities and to learn with more experienced people with the goal to built better modules for Portugal.

Let us re-think the Portuguese TTO network and maybe do some benchmarking towards a "good practice procedures" so TT may evolve

All who were present may contribute to the dissemination of good tt's practices

More knowledge and sharing

Having joint efforts for tech commercialization will benefit Portugal

#### Other Comments

To be seen

For an impact at national level the broad participation of Rectors and Faculty Deans would have been required.