

 **INTERFACE**
ENTREPRISES UNIVERSITE

*ASTP workshop
Zaandam, October 28, 2011*

**Knowledge Transfer in human science :
is it relevant ?**

*Dr Ir Michel Morant
CEO Tech Tranfer Office University of Liege, Belgium
Member of the board of LIEU, Belgium
Chair-Elect Proton Europe*

  

 **INTERFACE**
ENTREPRISES UNIVERSITE

The University of Liège : some figures

- State university grounded in 1817
- 11 faculties
- 20.000 students
- Campus in Liège, Gembloux, Arlon
- Open to the Euregio M-R, and Great Region (Lu, De, Fr)
- 600 professors, 3000 scientists
- University Hospital (4000 employees)
- 400 Mio€ total budget (50% for research)
- 1000 concurrent research contrats (70 FP7)
- 60 Mio€/year direct contracting with companies
- Science park with 100 high tech companies
- 100 spin-off companies grounded
- 25 patents a year – 20 licences a year



Dr Ir M. Morant *ASTP Meeting, Zaandam, October 2011*

What role for a KTO in human science ?

- *Management, Psychology, Pedagogy, Sociology, Communication, ... is this technology ?*
- *University infrastructures : internet, library, that's it*
- *IP management : copyright*
- *Language : english is not the only lingua franca*
- *Personal expertise is dominant*
- *Academics have there own parallel business*
- *What role ca be played by a KTO ?*
- *What kinds of method can be used ?*

What can be transfered ?

- **Software**
- **Methods**
- **Data bases**
- **Knowledge**
- **Know-how**
- **Brand**
- **Image**

Doing business inside the Uni

- Alumni is the main knowledge transfer stream

But

- Pure Contracting and service is possible
- The unit is managed as a SME, inside the University, lead by the head of the dpmt.
- University overheads is 15%, laboratory overheads in addition (administration, telephone, web site, ..)
- University gives administrative support (building, ICT network, contracts of employees, treasury, ...) and controls the global finance situation of the dpmt

Some exemples

- **LECIT team : Ergonomy**
 - Human error analysis – Risk prevention
 - Out of procedure behaviours in hospital, in aeronautics
 - How to minimize the risks
 - Design and new technologies
 - Less lethal weapons
 - Impact of 3D imaging in surgery procedures
- **SPIRAL Group : Risk Management**
 - Risk and Public Governance
 - Social preception of risks (GMO, Nuclear waste, Food safety, nanoparticles)
 - Assessment of technology options (biometric passport, people control,...)



INTERFACE
ENTREPRISES UNIVERSITEIT

Licensing softwares : classic

- **Similar as in engineering**
 - Basic method or algorithm has been published
 - The software is not disclosed
 - The KH is inside the software
 - The licensed object is well defined : software, user manual, ... on a CD
- **What is the shortest way to get the KH for a licensee ?**
 - Valuation :
 - Time spent to develop
 - Time to recover the development with the updated available information
 - Added value in a process
- **Innovation Policy : to be one cycle ahead the competitors**

Dr Ir M. Morant ASTP Meeting, Zaandam, October 2011



INTERFACE
ENTREPRISES UNIVERSITEIT

Examples of spin offs based on softwares

- ***Gambit Financial Solutions :***
 - Financial profiling of investors : licensed by ULg/HEC
 - Extended to advise investors
 - Optimisation of investment portfolio
- ***N-Side : process optimisation***
 - Algorithm of discrete optimisations licensed by UCL and ULg, mainly dedicated to logistics problems
 - Extended by the company to other applications, other markets
 - Clinical trials : optimisation of the supply of drugs among the partner hospitals
 - Energy : daily optimisation of production means
 - Steel industry : optimisation of raw materials

Dr Ir M. Morant ASTP Meeting, Zaandam, October 2011



Examples of spin offs based on softwares

- **Assess Group :**
 - Method for assessing the knowledge level after a training
 - 2 softwares licensed by ULg (Pedagogy school)
 - The company has build a full service, usaing these softwares : advices, assessment of trainees, assessment of employees, ...
- **What transfer model ?**
 - The Licence is paid by shares of the company
 - Improvements of the software functionalities are provided by the university; customisation, portability, machine ergonomy is developped by the company

Dr Ir M. Morant ASTP Meeting, Zaandam, October 2011



Knowledge, know-how

- **Licence on the use of a set of documentation or methods**
- **With the image of the University in addition**
- **Ex : *Pragmagora***
 - Change management and innovation implementation
 - Faculty of psychology
 - Licence on methods and use of ULg reputation
 - Scientific and ethic board in the spin off
 - Cooperative company, with external consultants

Dr Ir M. Morant ASTP Meeting, Zaandam, October 2011

What are the advantages

- **For research :**
 - To be close to the needs
 - Enables to do « translational medicine »
- **For education :**
 - Enables up dated knowledge to be taught
 - Shortens the distance between graduates and companies
- **For companies :**
 - Having tailor made or new solutions
 - To be backed by the image of the University while human science can cover different realities.

Continuous education

- **Companies are demanding flexible education program for there management**
- **Management schools ... wide offer**
- **Human science subjects ...**
 - Environment impact
 - Sociological impact
 - Risk assessment
 - Mass people behaviour



Thank you for your attention

www.interface.ulg.ac.be



Dr Ir M. Morant

ASTP Meeting, Zaandam, October 2011