

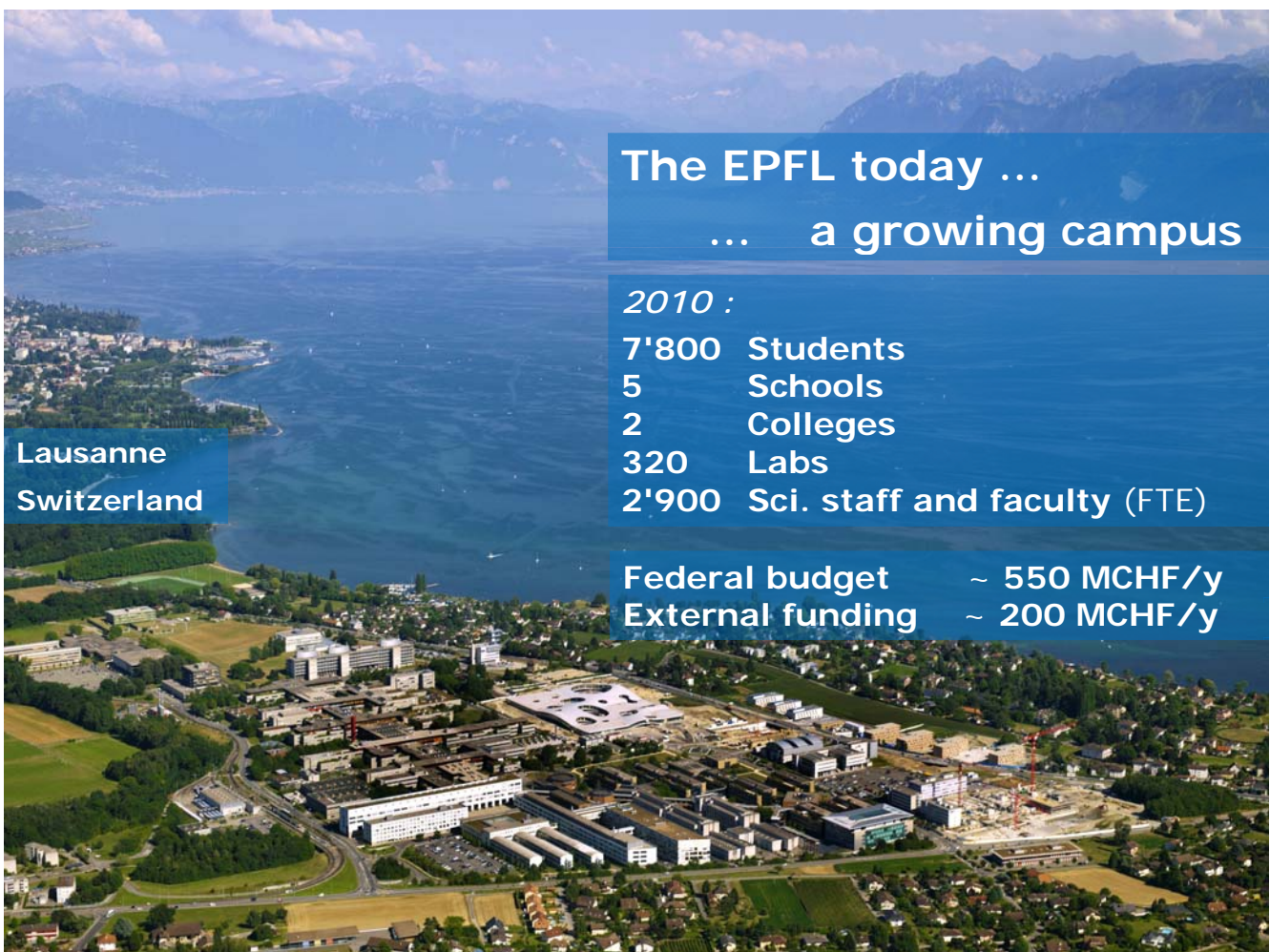
Technology Transfer @ EPFL

a short overview

WIPO - OMPI seminar on patents and technology transfer
Geneva, Dec. 5th, 2011

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**Lausanne
Switzerland**

**The EPFL today ...
... a growing campus**

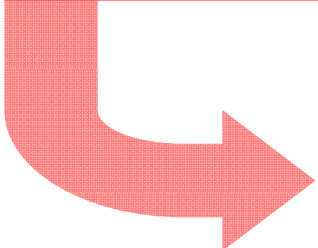
2010 :
7'800 Students
5 Schools
2 Colleges
320 Labs
2'900 Sci. staff and faculty (FTE)

Federal budget ~ 550 MCHF/y
External funding ~ 200 MCHF/y

1) Teaching & Education

2) Research

3) Innovation & Technology Transfer



Contribute to create and develop ...

future **companies**

future **jobs**

future **products / services**

future **competitiveness**

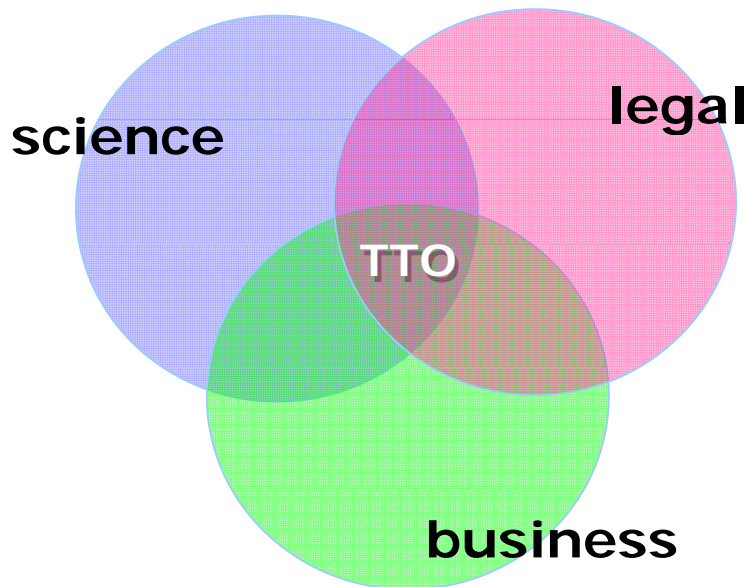
future **quality of life**

Relations with the economy **early and continuous commitment of EPFL**

- ...
- 2010 : opening **Innovation Square** for R&D hubs of leading Cnies
- 2009 : additional affordable m2 for start-ups : "Le Garage"
- 2008 : seed fund (polytech ventures)
- 2007 : revised TT regulations & **overhead policy**
- 2006 : **new partnerships** : endowed chairs, indus. incubators
- 2005 : centers, programs, **innovation grants, TT alliance**
- 2004 : **vice-presidency for innovation and TT**
- 2003 : legal framework adapted for efficient TT
- 2000 : first equity deals
- 1999 : rules for remuneration of inventors and labs
- 1999 : entrepreneurship courses
- 1998 : **technology transfer : creation of the TT office**
- 1997 : coaching for early stage start-up projects
- 1995 : **pre-seed money** for start-up projects : foundation FIT
- 1993 : legal personality -> **IP strategy / licensing**
- 1991 : **science park created** : foundation PSE
- 1988 : **policy for research contracts & partnerships**
- 1986 : two first major strategic industrial partnerships
- 1986 : **industrial liaison program** : Cast / association APLE
- ...

The Technology Transfer Office

Professional services for researchers



EPFL-TTO :
6.0 FTE TT officers
0.5 FTE mngmt
1.6 FTE back-office
(9 personnes)

Our duties as TT office

We are a service for the labs and for the EPFL

- ❖ **Research agreements**, incl. service contracts and partnerships with Companies (negotiations / approval)
- ❖ **Intellectual property** : evaluation, protection & management
- ❖ **Technology licensing** : licenses and other TT agreements
- ❖ **Interactions with start-up companies** : licenses, equity, R&D agreements, access to labs, conflicts of interests, etc.
- ❖ **TT policies**, laws and regulations related to TT, ...
- ❖ @ EPFL : **practical course for PhD students** in mgmt of innovation and TT within doctoral school > MINTT www.mintt.ch

Research agreements handled by the office : > 300 / year

New invention disclosures : ca 80-100 / year

New priority patent applications : ca 40-50 / year

New licenses / TT agreements signed : ca 30-50 / year

New Start-ups : ca 10-15 / year (> 180 since 1990)

Licensing revenues : ca 1-3 MCHF/ year

Active patent cases (mngmt EPFL-TTO) : > 300

Active licenses / TT agreements : > 350

Not included : IP directly transferred through R&D contracts

Technology licensing (main actions of EPFL-TTO) :

Evaluate invention disclosures

Definition of a transfer strategy

Protect intellectual property when appropriate

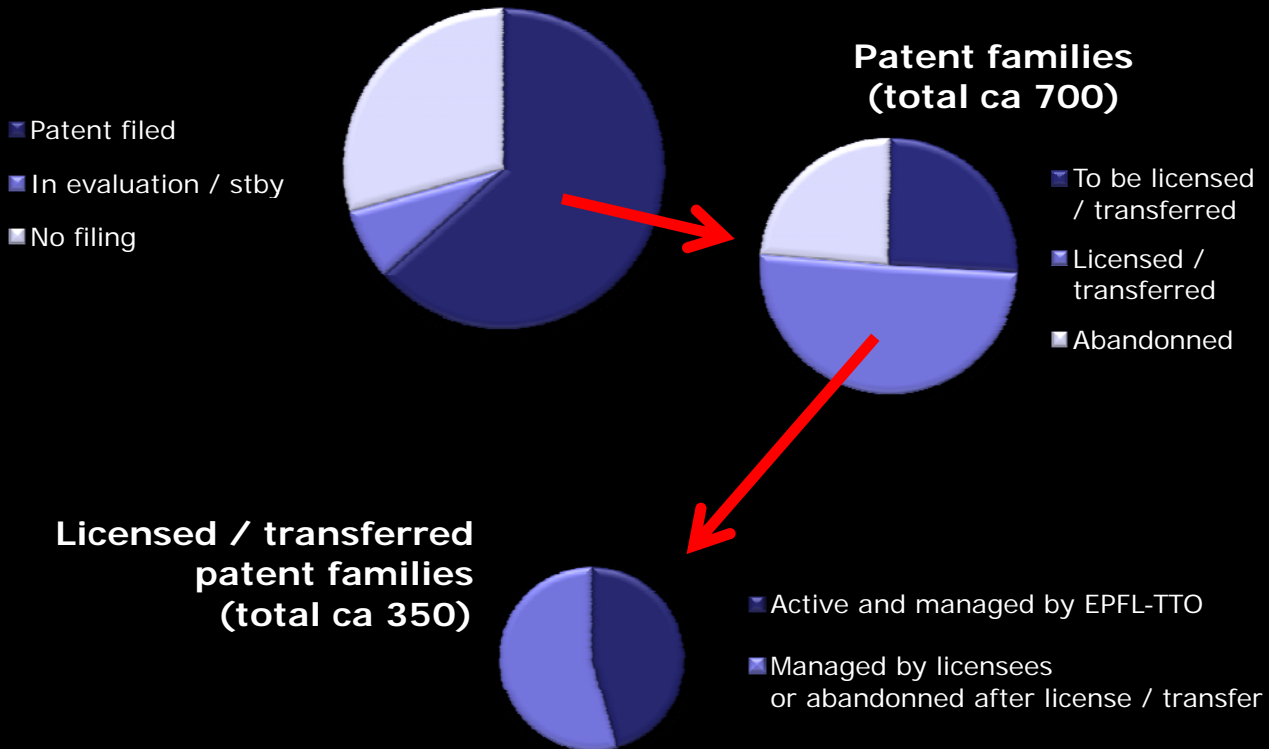
Search for partners

Licensing and transfer agreements

IP management, license follow-up, financial management, distribution of returns (3 x 1/3 rule)

→ "cradle-to-grave" responsibility !!

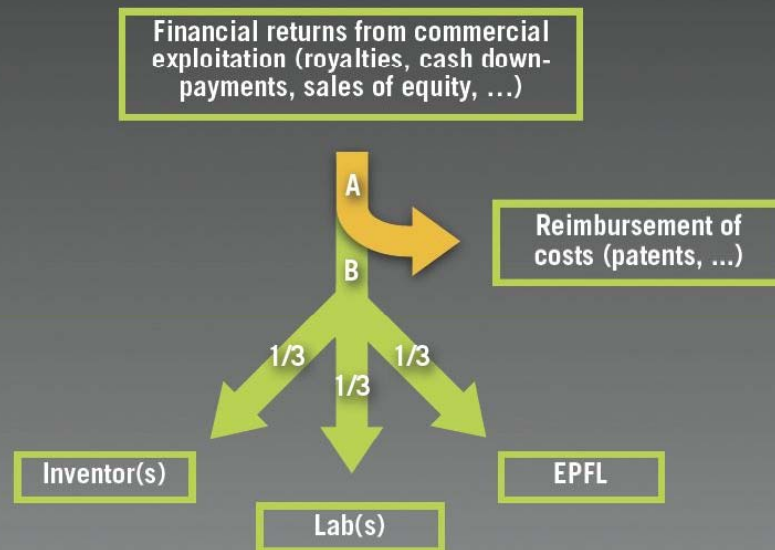
EPFL Invention disclosures (total ca 1'100)



Not only patents are interesting for our partners ...

- Software
- Detailed specifications of a system, drawings, data
- Design and realization of a circuit board
- Design and testing of an IC or micro-system
- Demonstrator, early stage prototype
- Biological material, chemical compound
- Know-how
- Trademark
- ...

Distribution of financial returns from licensing at EPFL



EPFL : Research collaboration with industry

attractive conditions, flexibility

Objectives of the policy :

- Easier and shorter negotiations
- Attractive IP conditions for companies
- Clear general rules with possibilities for special cases (flexibility)
- Fair contributions to indirect costs (overhead policy - OH)

>>>>>>>> 3 "std" types of industrial contracts :

- Research agreement (OH 40%)
- Industrial grant (OH 20%)
- Service agreement (OH 60%)

(see also <http://sri.epfl.ch>)

- **multi-years / multi-labs research programs in key fields of common interest (framework agreements)**
 - **endowed chairs & donations**
 - **mutual access to costly research infrastructures**
 - **academic activities of industrial researchers**
-
- ✓ **active marketing and follow-up**
 - ✓ **top management commitment**

Technology Transfer : our philosophy

- Do what is "best for the technology"
- Foster good industrial relations
- Be reasonable
- Be flexible
- Be action/results oriented

from K. Ku, Head of OTL and ICO of Stanford

... and read also the documents :

- Nine Points to Consider in Licensing University Technology
- University Technology Transfer "Why we do what we do"

available on the AUTM website :

www.autm.net/White_Papers/3754.htm

... always in very close collaboration with the scientists / inventors and the responsible professor !!

We want and need :

proximity & team work !

Technology transfer / licensing

a few TT cases (1/2)

Audio technologies

- many licenses and IP transfer
- lic. to Logitech (echo-canceling / web cam)
- start-up



Delta Robot

successful industrialization > 20y
follow-up applications

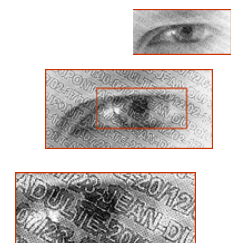


Early detection of bladder cancer using
phodynamic therapy (jointly with univ. hosp.)

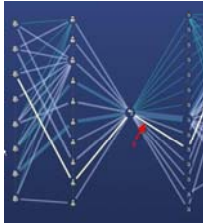
HEXVIX[®]
HEXAMINOLEVULINATE

Security of documents

many licenses to various partners



Contact lenses for monitoring of
intraocular pressure
- start-up with VC financing



IT network security
- start-up with VC financing

Telemetry-controlled implants
- start-up acquired by corporate



Photovoltaic Dye Solar Cells
- many licenses worldwide

Collaboration with corporates

partnerships : a few recent examples

Partnership with Nestlé
2 endowed chairs
R&D program



Partnership with Merck Serono
3 endowed chairs
R&D program

Partnership with Logitech
Joint project incubator on campus
R&D and student projects



Partnership with NOKIA
Nokia lab on campus
R&D program



Partnership with ALCAN Eng. Products
ALCAN innovation cell on campus
1 endowed chair, R&D program



+ Swissquote, Debiopharm, La Poste, EOS, Crédit-Suisse, ...

Technology Transfer is people's business

Academic research ↔ Economy & industry



« win - win »