

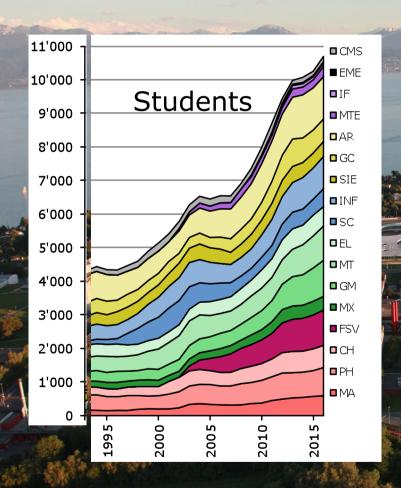
BrightnESS conference Oct. 11, 2017, Copenhagen "Establishing and maintaining an innovation framework"

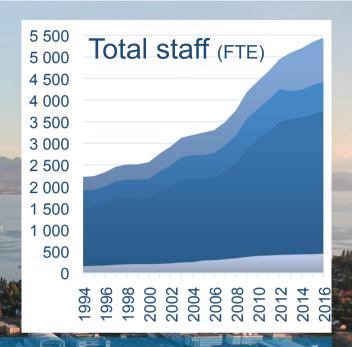
# TT and innovation @ EPFL a short overview

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# The EPFL today ... a growing campus





2016:

> 10'500 Students

> 350 Labs in

Schools and

Colleges

> 3'750 Sci. staff and faculty (FTE)

> 150 **Companies on campus with** > 1'700 jobs

Federal budget ~ 650 MCHF/y External funding

~ 310 MCHF/y



#### **EPFL's missions (according to the law)**

- 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

#### **EPFL Tech transfer:** What we have done between 1991 and now

- 1'781 technology disclosures (today ca 160-170/year)
- 1001 priority patent applications (today ca 90-100/year)
- > 500 granted patents (today ca 60/year)
- **567** active patent families managed by the TTO by end of 2016, with **44%** under a license or option
- 765 licenses & TT agreements signed (today ca 50-60/year)439 active licenses and options by end of 2016
- 288 start-ups/spin-offs created (today 15-20/year)

Today ca 250/year new industrial contracts negotiated by TTO

Licensing revenues 2011-2016 average : ca 4.7 MCHF/year

\*) EPFL-TTO data 1991-2016

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#### early and continuous commitment of EPFL

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2014: Wyss center (translational neurotechn.) in Geneva
                    2013: "La Forge" opens for early stage start-up projects
                  2011: proof-of-concept program "ENABLE" launched by TTO
               2010 : opening Innovation Park (7 bldgs) for R&D hubs of leading Cnies
             2009 : additional affordable m2 for start-ups : "Le Garage" (1 bldg)
            2008 : seed fund (polytech ventures)
           2007: revised TT regulations & overhead policy
         2006: new partnerships: endowed chairs, indus. incubators / innov. cells
        2005 : centers, programs, Innogrants, ILP "alliance" goes regional
        2004: creation of 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: formal creation of the TT office
    1997: coaching for early stage start-up projects
   1995: pre-seed money for start-up projects: Fondation FIT
  1993: legal personality -> IP strategy / start of licensing
  1991: science park created: EPFL Innovation Park foundation (now 5 bldgs + Geneva)
 1988: policy for research contracts & partnerships
1986: two first major strategic industrial partnerships
1986: industrial liaison program: Cast / association APLE (now "alliance" regional ILP)
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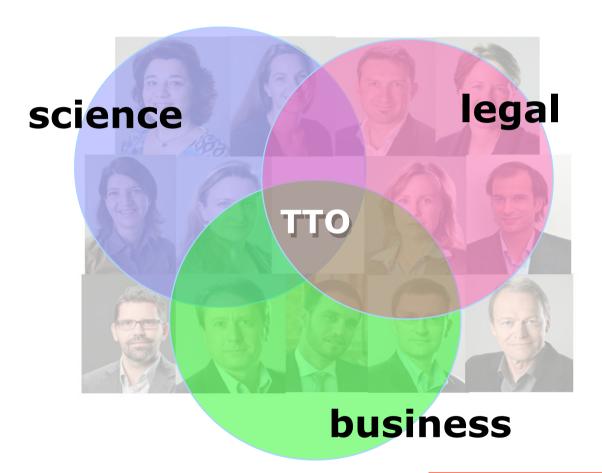
#### Innovation and technology transfer at EPFL

Full value chain of relationships with industrial partners

economy START-UPS **CORPORATES SMEs** Entrepreneurship, R&D projects / sc. services Strategic partnerships coaching, access to Public grants for R&D ■ R&D projects / sc. services facilities, events, ... Find the right skills Access to facilities, events, .. Grants for start-up projects Public grants for R&D → Regional Industry → Corporate Relations → Innogrants → Innovation Park **Liaison Program** → Innovation Park Special initiatives -> Transdisciplinary Centers, Discovery Projects, ... **Technology Transfert Office (TTO)** → IP management, Licensing, Technology early development (PoC), Contracts with industry EPFL - labs

### The Technology Transfer Office of EPFL (TTO)

- = professional services for researchers
- = professional interlocutor for companies



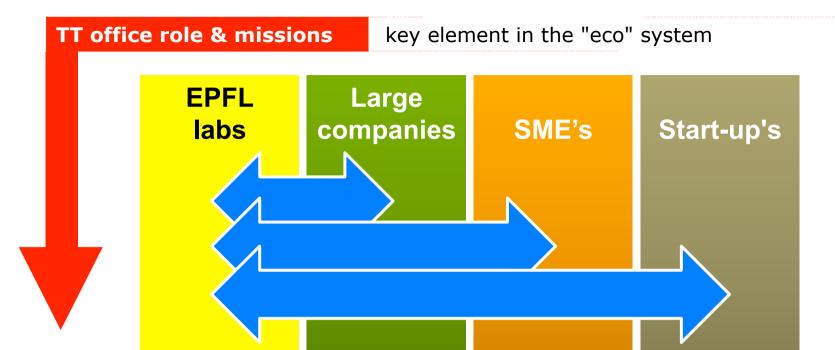
#### **EPFL-TTO:**

- 8.3 FTE TT managers and lawyers (1.8)
- 0.9 FTE IP specialist
- 1.0 FTE PoC "Enable"
- 2.8 FTE back-office
- 0.5 FTE mngmt

--> 13.5 FTE

**Technology Transfer is people's business** 

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- Research agreements with industry (negotiations / approval)
- Intellectual property : evaluation, protection & management
- Stimulate and support demonstration of new techn. (ENABLE)
- Negotiate, conclude and manage licenses and TT agreements
- Interactions with start-up's : equity, access to facilities, COI, ...
- TT & IP policies
- Practical course for PhD students

http://tto.epfl.ch

#### **Objectives of the policy:**

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

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>>>>>> 3 "std" types of industrial contracts:
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- Research agreement (OH 40%)
- Industrial grant (OH 20%)
- Service agreement (OH 60%)

#### std conditions and contracts published online :

http://tto.epfl.ch/our\_research\_agreements\_1

#### **Technology licensing** (main actions of EPFL-TTO):

Evaluate invention disclosures: prior art, potential, ownership, ...

Define development & transfer strategy

Protect intellectual property, links with external patent agents, manage patent portfolio (costs shared with labs from international filings)

Stimulate & support demonstration ("enable" program)

Search for partners, negotiate and conclude licenses and transfer agreements

Manage licenses, IP, finances, equity, ... distribute benefits

→ "cradle-to-grave" responsibility !!

## Enable program of TTO: a push to help bridging the gap ...

Easing the path to industrial development -> projects

Research

enable

**Industry Start-up** 

Raising awareness to innovation through exposure and education

-> internships for master students



http://enable.epfl.ch/

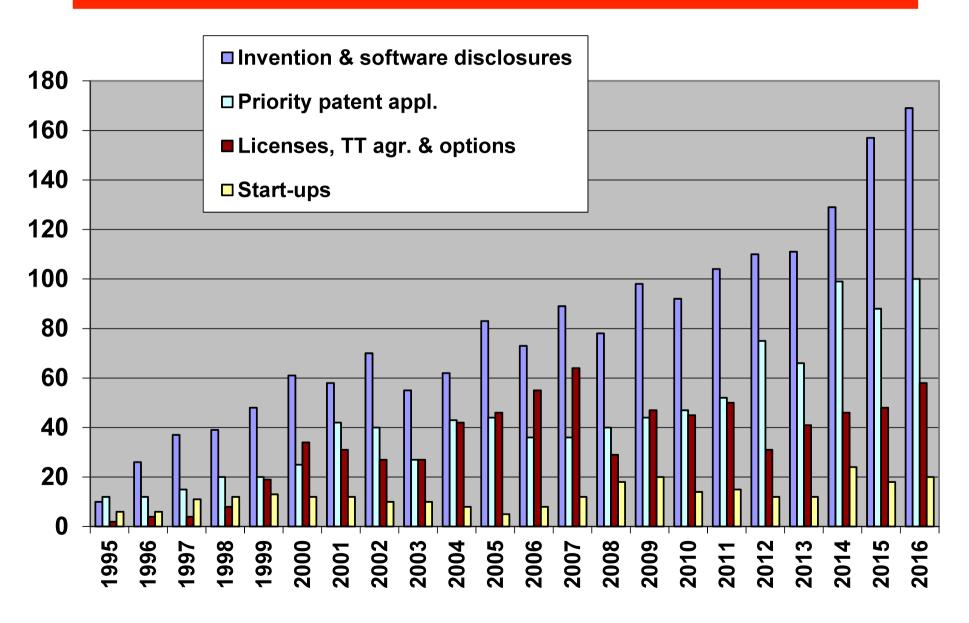
#### **University Technology Transfer ...**

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

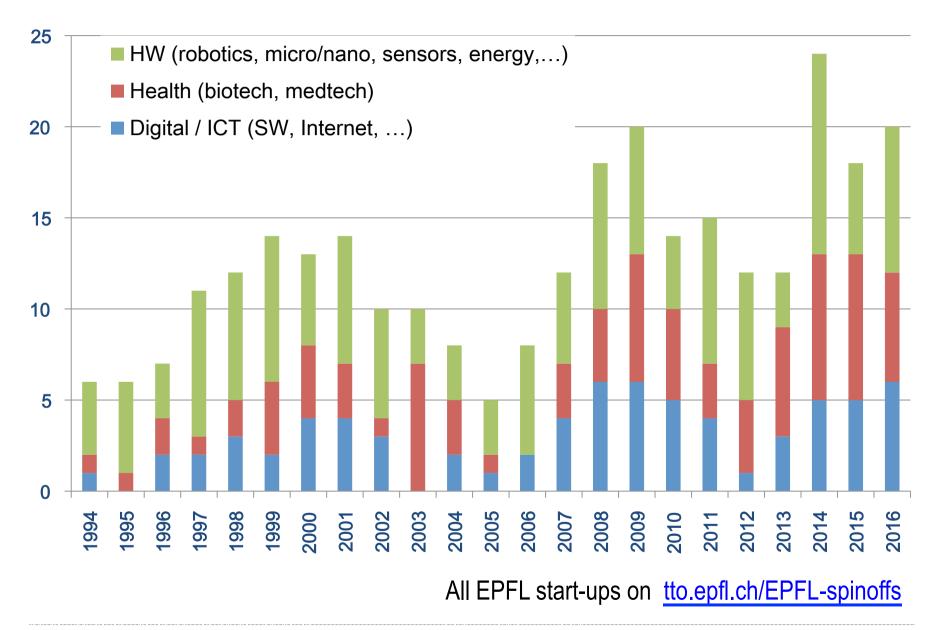
We want and need:

proximity & team work!

#### **EPFL Tech Transfer: a few stats**



# **EPFL START-UPS**



#### **Elements for successful relations with the economy and KTT**

- ✓ High level of autonomy for the institutions (higher authorities shall not impose detailed laws and regulations but define general principles and trust the academic institutions)
- ✓ Collaboration with industry and KTT recognized as important mission of the institution by the top management
- ✓ No compromise on quality of research, recruitment at the best level worldwide
- ✓ Active involvement of highest management for strategic partnerships with companies and for major initiatives
- ✓ Delegation of decisions to the TT Office in order to have an efficient and responsive TT; recruitment of TT managers with experience in industry
- ✓ Reasonable role of lawyers, acceptance of risks
- ✓ Proximity of TTO with researchers and faculty



# **Technology Transfer is people's business**





« win - win »

