EPFL Innogrants & Support to Start-Ups

**The Innovation Dilemma**

“I read occasionally about attempts to set up "technology parks" in other places, as if the active ingredient of Silicon Valley were the office space. An article about Sophia Antipolis bragged that companies there included Cisco, Compaq, IBM, NCR, and Nortel. Don't the French realize these aren't startups?”

Paul Graham

“How to be Silicon Valley?”

Few startups happen in Miami, for example, because although it's full of rich people, it has few nerds. It's not the kind of place nerds like. Whereas Pittsburgh has the opposite problem: plenty of nerds, but no rich people.
How not to be Sophia Antipolis?

Ingredients of tech clusters…

- Universities and research centers of a very high caliber.
- An industry of venture capital (i.e. financial institutions and private investors).
- Experienced professionals in high tech.
- Service providers such as lawyers, head hunters, public relations and marketing specialists, auditors, etc.

Last but not least, an intangible yet critical component: a pioneering spirit which encourages an entrepreneurial culture.

Source: M. Kenney “Understanding Silicon Valley, the Anatomy of an Entrepreneurial Region”, in chapter: “A Flexible Recycling” by S. Evans and H. Bahrami
AGENDA

INNOVATION AND TECH. TRANSFER

THE INNTEGRANTS
ROLE MODELS
ABOUT SOME INNTEGRANTS
EPFL Today

Overview

Some numbers

Campus (2017)
10,866 students, of whom 2,142 PhD students
343 faculty
3,854 staff (scientific & technical)

Spending (2017)
CHF 632M from State budget
CHF 317M other funding (EU, SNSF, private...)
Total: CHF 949M
**EARLY AND CONTINUOUS COMMITMENT OF EPFL**

- **2017**: Focus on student entrepreneurs, Xgrants
- **2016**: VPIV transformed as VPI with TTO joining VPR
- **2015**: New Start-up Guidelines
- **2015**: China Hardware Innovation Camp
- **2014**: The Eurotech Venture Program (EVP)
- **2013**: La Forge
- **2011**: VPIV moves to Innovation Park
- **2010**: EPFL Innovation Park
- **2009**: the Garage
- **2008**: seed fund
- **2007**: revised TT regulations & overhead policy
- **2006**: new partnerships: endowed chairs, indus. Incubators
- **2005**: centers, programs, Innogrants, TT Alliance
- **2004**: vice-presidency for innovation and tech. transfer (VPIV)
- **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 (SRI)
- **1997**: coaching for early stage start-up projects
- **1995**: pre-seed money for start-up projects: foundation FIT
- **1993**: 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
VPI - A Facilitator Between Two Worlds

EPFL Community
(Professors, Researchers, Students)

VPR
- Transdisciplinary Centers & Discovery Projects
- Technology Transfer Office (TTO)
- Contracts / Licenses / PoC (Enable)
- Bachelors / Masters

VPI
- Strategic Partnerships
- Innovation Park
- Alliance - relationships / collaborations with SMEs
- Entrepreneurship
- Innogrants xgrants

VPE

vpi.epfl.ch

EPFL Innogrants | 2018
What’s are Start-ups? What do they need?

In the USA, “a start-up is a temporary organization designed to search for a repeatable and scalable business model.”

*Steve Blank*

At EPFL, resources include:

- **Advice** (training, coaches, mentoring)
- **Funding** (grants, prizes, investments)
- **Office space** (co-working spaces, incubators, accelerators, science parks)
- **Exposure** (events, networking, role models, pitching of ideas)
- **Internationalization** (trips, bus. dev., foreign offices)
Funding: Surviving the “Valley of Death” at EPFL

Research Grants | Development Grants | Preseed Grants | Friends, Family & Fools | Business Angels, Seed VCs | Early Stage VCs, Corp. Partners | Late Stage VCs (… M&A / IPO)

Basic Research | Applied Research | Proof of Concept / Business Case | Prototype Founders | Product Development | Company Fast Growth (Revenues, Employees)

“A rich ecosystem”
It’s not about Money only: A Rich and Dense Ecosystem

Advice/Training:

Exposure/networks:

Housing:

Research Grants
Development Grants
Preseed Grants
Friends, Family & Fools
Business Angels, Seed VCs
Early Stage VCs, Corp. Partners
Late Stage VCs (… M&A / IPO)

Basic Research
Applied Research
Proof of Concept / Business Case
Prototype Founders
Product Development
Company Fast Growth (Revenues, Employees)

A rich ecosystem
More than funding

“Valley of Death”

Start-Up foundation

A to D
E to J

Research
Grants
Development
Grants
Preseed
Grants
Friends,
Family &
Fools
Business
Angels,
Seed VCs
Early Stage
VCs, Corp.
Partners
Late Stage VCs
(… M&A / IPO)
A Rich Ecosystem

An exhaustive description is available online

http://short.epfl.ch/ecosystem

https://vpi.epfl.ch/resources-for-startups
Close Support: The EPFL Innovation Park

- The Innovation Park: 13 buildings for companies partnering & collaborating with EPFL
  [http://epfl-innovationpark.ch](http://epfl-innovationpark.ch)

- Including 6 buildings for start-ups, offering a variety of value-added services (coaching, training, funding,…)

- The Garage (opened in 2008) for very early stage ventures.

- A co-working open-space for early projects
"During the 1970s and 1980s, many of the top engineers from Fairchild, National and other companies would meet there to drink and talk about the problems they faced in manufacturing and selling semiconductors. It was an important meeting place where even the fiercest competitors gathered and exchanged ideas."

“If there is a single point I wish to make here today, it is that as a discipline, both in industry and in academia, we are just not taking enough risks today.”
Richard Newton (1951-2007)
**Any Start-up Project Takes Time**

Pedro Bados (Nexthink) is a just one but clear illustration that even a friendly ecosystem will not avoid a long maturation.

**Key Milestones**

- **Sept 03:** Invention disclosure
- **March 04:** Option for License
- **April 04:** Patent filing
- **Janv. 04:** Contact with an IT expert
- **May 04:** Publication in Dialogue newsletter
- **Mar 04-Jun 04:** Coaching PSE financed by EPFL
- **Jun 04:** Loan of CHF100k
- **Sept 04:** Foundation of NEXThink SA
- **Avril-Sept 04:** Further coaching
- **Déc. 04:** Winner of the "startup competition"
- **Dec 04:** Contacts with VCs
- **Jan 05:** 1st pilots with customers
- **April 06:** 1st round CHF 1.6M
- **Jul. 07:** 2nd round CHF 6M
- **As of 2017:** More than 65M in funding, more than 300 employees, [www.nexthink.com](http://www.nexthink.com)

**Timeline:**

- **Generate**
- **Develop**
- **Launch**
- **Grow**

**A 2-3 year initial phase**
EPFL Spin-offs

All EPFL start-ups on www.spied.ch

Innovation & Tech. Transfer

Start-ups

EPFL Innogrants | 2018
## High-Growth Start-ups (Present)

<table>
<thead>
<tr>
<th>Company</th>
<th>Founded</th>
<th>VCs</th>
<th>Amount raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dartfish</td>
<td>1998</td>
<td>Vinci, Intel</td>
<td>CHF 20M</td>
</tr>
<tr>
<td>Sensimed</td>
<td>2003</td>
<td>Wellington, Vinci</td>
<td>CHF 57M</td>
</tr>
<tr>
<td>Nexthink</td>
<td>2004</td>
<td>VI, Auriga, Highland Europe, Waypoint</td>
<td>CHF 65M</td>
</tr>
<tr>
<td>Amazentis</td>
<td>2007</td>
<td>Waypoint, H. Wyss, P. Landolt, A. Hoffmann</td>
<td>CHF 10M+</td>
</tr>
<tr>
<td>Aleva Neurotherapeutics</td>
<td>2008</td>
<td>Biomed Inv., BB Biotech, Defi Gestion, Banexi</td>
<td>CHF 44M</td>
</tr>
<tr>
<td>Bicycle Therapeutics Ltd</td>
<td>2009</td>
<td>Novartis Venture, Atlas, SR-One, Vertex</td>
<td>CHF 95M</td>
</tr>
<tr>
<td>Anokion</td>
<td>2010</td>
<td>Versant, Novartis, Novo</td>
<td>CHF 33M</td>
</tr>
<tr>
<td>Lightbend</td>
<td>2010</td>
<td>Greylock, Shasta, Polytech, Intel, IBM</td>
<td>CHF 52M</td>
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<tr>
<td>Abionic</td>
<td>2010</td>
<td>Polytech, Blue Ocean, Medholdings</td>
<td>CHF 13M</td>
</tr>
<tr>
<td>Kandou Bus</td>
<td>2011</td>
<td>Bessemer</td>
<td>CHF 25M</td>
</tr>
<tr>
<td>Mindmaze</td>
<td>2012</td>
<td>Hinduja Group, Buss angels (inc. Leonardo DiCaprio)</td>
<td>CHF 100M</td>
</tr>
<tr>
<td>L.E.S.S.</td>
<td>2012</td>
<td>VI Partners</td>
<td>CHF 3M</td>
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<tr>
<td>Cyberhaven</td>
<td>2014</td>
<td>Accomplice</td>
<td>CHF 2M</td>
</tr>
<tr>
<td>GTX Medical (G-therapeutics)</td>
<td>2014</td>
<td>Gimv, Wellington Partners, LSP, Inkef Capital</td>
<td>CHF 30M</td>
</tr>
<tr>
<td>BestMile</td>
<td>2014</td>
<td>Partech, Serena, Airbus</td>
<td>CHF 16M</td>
</tr>
<tr>
<td>Lunaphore</td>
<td>2014</td>
<td>Zühlke Ventures, Polytech, Occident Group</td>
<td>CHF 8M</td>
</tr>
<tr>
<td>Gamaya</td>
<td>2015</td>
<td>VI Partners, ICOS Capital, Sandoz Foundation</td>
<td>CHF 8M</td>
</tr>
<tr>
<td>Inpher</td>
<td>2015</td>
<td>Polytech, Bowery, Crosslink</td>
<td>CHF 4M</td>
</tr>
</tbody>
</table>
## High-Growth Start-ups (Past)

<table>
<thead>
<tr>
<th>Company</th>
<th>Founded</th>
<th>VCs</th>
<th>Amount raised</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snaketech</td>
<td>1997</td>
<td>Auriga, Innovacom, Sudinnova</td>
<td>CHF 3M</td>
<td>M&amp;A Cadence/Simplex</td>
</tr>
<tr>
<td>Cytion</td>
<td>1997</td>
<td>Banexi</td>
<td>CHF 5M</td>
<td>M&amp;A Molecular Dev.</td>
</tr>
<tr>
<td>Endoart</td>
<td>1998</td>
<td>Sofinnova, VI, Vinci</td>
<td>CHF 31M</td>
<td>M&amp;A Allergan</td>
</tr>
<tr>
<td>BeamExpress</td>
<td>2001</td>
<td>Index, Oak, i-source, Polytech</td>
<td>CHF 30M</td>
<td></td>
</tr>
<tr>
<td>Innovative Silicon</td>
<td>2002</td>
<td>Index, Austin, Highland, Auriga, Wellington</td>
<td>CHF 60M</td>
<td></td>
</tr>
<tr>
<td>HPL</td>
<td>2004</td>
<td>VI, DFJ ePlanet, BankInvest</td>
<td>CHF 8M</td>
<td>M&amp;A Dow Chemical</td>
</tr>
<tr>
<td>Biocartis</td>
<td>2007</td>
<td>Advent, KBC, Aescap</td>
<td>CHF 330M</td>
<td>IPO Brussels</td>
</tr>
<tr>
<td>Quartet Medicine</td>
<td>2013</td>
<td>Atlas, Novartis, Pfizer</td>
<td>CHF 23M</td>
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</table>
Many companies attracted by the EPFL Innovation Park and the dynamic local economy

<table>
<thead>
<tr>
<th>Company</th>
<th>Founded</th>
<th>Amount raised</th>
<th>IPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC IMMUNE</td>
<td>2003</td>
<td>CHF 125M</td>
<td></td>
</tr>
<tr>
<td>AB2 BIO LTD</td>
<td>2010</td>
<td>CHF 41M</td>
<td></td>
</tr>
<tr>
<td>SOPHIA GENETICS</td>
<td>2011</td>
<td>CHF 58M</td>
<td></td>
</tr>
<tr>
<td>LEMAN MICRO DEVICES</td>
<td>2012</td>
<td>Undisclosed</td>
<td></td>
</tr>
<tr>
<td>ASCENEURON</td>
<td>2012</td>
<td>CHF 36M</td>
<td>IPO Nasdaq</td>
</tr>
</tbody>
</table>

High-growth Institutional funding
High-Growth Start-ups

- More than CHF1.2B raised by EPFL spin-offs with venture capital and business angels

- In addition, many entrepreneurial alumni & academics
EPFL Spin-off Recent Exits

- **BIOCARTIS**
  - IPO in April 2015 in Brussels

- **Lemoptix**
  - Acquired by

- **senseFly**
  - a Parrot company
  - Acquired by

- **Jilion**
  - Acquired by

- **PIX4D**
  - Acquired by

- **Parrot**

- **aimago**
  - Acquired by

- **bugbuster**
  - Acquired by

- **SENSIMA technology sa**
  - Acquired by

- **faceshift**
  - Undisclosed acquirer rumored to be Apple

- **NOVADAQ**
  - Acquired by

- **AppDynamics**
  - Bought by Cisco for $3.5B in Jan. 2017

- **MPS Monolithic Power Systems**

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Start-ups | Exits
EPFL Spin-off 2017 Exits

Acquired by

KB★MEDICAL

Acquired by

PIX4D

Acquired by

Parrot

Acquired by

Gaitup

Now Part of MindMaze

Acquired by

Mimotec

Acquired by

Acrotec Group
A 16-page report published in June 2017 analyzing 312 EPFL spin-offs (165 since 2007) with a focus on

- Fund raising: CHF1.2B overall
- Job creation: about 2’000 today in 200 firms
- Migrants: from 25% in the 90’s to 70% today

http://short.epfl.ch/startup-report
INNOVATION AND TECH. TRANSFER
THE INNOGRANTS
ROLE MODELS
ABOUT SOME INNOGRANTS
BACKGROUND

The Innogrants were created in February 2005 by EPFL with the support of Lombard Odier to:

- award grants that would encourage idea creation and help ideas to be developed,
- organize events facilitating the evolution of the innovation and entrepreneurial culture.

https://vpi.epfl.ch/innogrants
Sept premiers projets dans le giron de l’Innovation Network de l’EPFL

Un fonds pour transférer plus vite les nouveautés de l’EPFL vers l’économie

Innogrants
Facts & Figures

About 780 requests
118 grants (CHF11.2M)
75 companies created
CHF 33M in new grants
CHF 320M in equity
8 exits (M&As)

Innogrant origin

<table>
<thead>
<tr>
<th>College</th>
<th>Contacts</th>
<th>%</th>
<th>Grants</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>STI</td>
<td>203.5</td>
<td>26%</td>
<td>47.5</td>
<td>40%</td>
</tr>
<tr>
<td>IC</td>
<td>117.5</td>
<td>15%</td>
<td>29.5</td>
<td>25%</td>
</tr>
<tr>
<td>SB</td>
<td>73.5</td>
<td>9%</td>
<td>14.5</td>
<td>12%</td>
</tr>
<tr>
<td>SV</td>
<td>54</td>
<td>7%</td>
<td>12.5</td>
<td>11%</td>
</tr>
<tr>
<td>ENAC</td>
<td>33.5</td>
<td>4%</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>CDM/CDH</td>
<td>21.5</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>82</td>
<td>10%</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>External</td>
<td>195.5</td>
<td>25%</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>781</strong></td>
<td></td>
<td><strong>118</strong></td>
<td></td>
</tr>
</tbody>
</table>

STI (Engineering); IC (Computer Science Communications); SV (Life Sciences);
ENAC (Environment & Architecture); SB (Basic Sciences);
CDM (College of Management de Technology)

Innogrant vs. Immigrant
The SNF Spin Funds

Similar to the Innogrants in the IT field, managed by EPFL, Swiss-wide; ended in 2012.

16 projects (CHF 1.9M)
7 start-ups, 35M equity

http://www.mics.org/spinfund

http://www.nccr-robotics.ch/tech-transfer/startups/spinfund

Established in July 2013
4 projects
A Bet on People

with the support of

Young entrepreneurs

Innogrants
The Outputs

All EPFL start-ups on https://vpi.epfl.ch/EPFL_Spin-offs
AGENDA

INNOVATION AND TECH. TRANSFER

THE INNOGRANTS

ROLE MODELS

ABOUT SOME INNOGRANTS
“Launching a start-up is not a rational act. Success only comes from those who are foolish enough to think unreasonably. Entrepreneurs need to stretch themselves beyond convention and constraint to reach something extraordinary.” Vinod Khosla

“The difference is in psychology: everybody in Silicon Valley knows somebody that is doing very well in high-tech small companies, start-ups; so they say to themselves “I am smarter than Joe. If he could make millions, I can make a billion”. So they do and they think they will succeed and by thinking they can succeed, they have a good shot at succeeding. That psychology does not exist so much elsewhere.” Tom Perkins
IT’S ALSO ABOUT ROLE MODELS
IT’S ALSO ABOUT ROLE MODELS
ventures @ EPFL
Swiss ways of building start-ups
Thursday, April 21st, 2011
from 13:45 to 16:30 (door opening 13:15)
Rolex Learning Center, Forum, EPFL

Mandatory registration: www.venturelab.ch (venture ideas)

ventures @ EPFL
Swiss ways of building start-ups
Friday, November 4, 2011
from 13:50 to 16:30 (door opening 13:30)
Auditorium CE 2, EPFL

Mandatory registration: www.venturelab.ch

Only 100 seats available - mandatory registration: www.venturelab.ch

https://vpi.epfl.ch/startup_champions
DRINK LOCAL, THINK GLOBAL

So let me just add my translation of a quote by Daniel Borel, co-founder of Logitech and one of the infrarouge guests, that is extracted from an interview to magazine Trajectoire published on November 16, 2009. I think that it is consistent with what I usually publish here:

"The only answer that I may provide is the cultural difference between the USA and Switzerland. When we founded Logitech, as Swiss entrepreneurs, we had to enter very soon the international scene. The technology was Swiss but the USA, and later the world, defined our market, whereas production quickly moved to Asia. I would not like to look too affirmative because many things change and many good things are done in Switzerland. But I feel that in the USA, people are more opened. When you receive funds from venture capitalists, you automatically accept an external shareholder who will help you in managing your company and who may even fire you. In Switzerland is not very well accepted. One prefers a small pie that is fully controled to a big pie that one only controls at 10%, and this may be a limiting factor”. 

Tags: Switzerland

This entry was posted on Friday, May 28th, 2010 at 9:08 am and is filed under Silicon Valley and Europe. You can follow any responses to this entry through the RSS 2.0 feed. You can leave a response, or trackback from your own site.
Silicon Valley, Still The Model...

Steve Jobs about why Silicon Valley “[There are] two or three reasons. You have to go back a little in history. I mean this is where the beatnik happened in San Francisco. It is a pretty interesting thing…You've also had Stanford and Berkeley, two awesome universities drawing smart people from all over the world and depositing them in this clean, sunny, nice place where there's a whole bunch of other smart people and pretty good food. And at times a lot of drugs and all of that. So they stayed… I think it’s just a very unique place”

Don Valentine on Founders: “Founders are genetically impossible by choice.” “There are only two true visionaries in the history of Silicon Valley. Jobs and Noyce. Their vision was to build great companies…Steve was twenty, un-degreed, some people said unwashed, and he looked like Ho Chi Min. But he was a bright person then, and is a brighter man now… Phenomenal achievement done by somebody in his very early twenties… Bob was one of those people who could maintain perspective because he was inordinately bright. Steve could not. He was very, very passionate, highly competitive.”
AGENDA

INNOVATION AND TECH. TRANSFER THE INNOGRANTS ROLE MODELS ABOUT SOME INNOGRANTS
## Innogrants - 2005

<table>
<thead>
<tr>
<th>Project</th>
<th>Laboratory (School)</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mimosys</td>
<td>Processor Architecture Laboratory (IC/LAP)</td>
<td>Paolo Ienne / Jason Brown</td>
</tr>
<tr>
<td>Production of proteins</td>
<td>Cellular Biotechnology Laboratory (External &amp; SV/LBTC)</td>
<td>Peter Bromley / Florian Wurm</td>
</tr>
<tr>
<td>Cytomec</td>
<td>Orthopaedic Research Division (STI)</td>
<td>Tom Quinn</td>
</tr>
<tr>
<td>DAAV technologies</td>
<td>Distributed Information Systems Laboratory (IC/LSIR)</td>
<td>Jie Wu</td>
</tr>
<tr>
<td>Opt.im</td>
<td>Artificial Intelligence Laboratory (IC/LIA)</td>
<td>Ion Constantinescu</td>
</tr>
<tr>
<td>Cooling techniques of microprocessors</td>
<td>Heat and Mass Transfer Laboratory (STI/LTCM)</td>
<td>James DeRose</td>
</tr>
<tr>
<td>Anokion</td>
<td>Merck Serono Chair in Drug Delivery (SV/LMRP)</td>
<td>Jeff Hubbell</td>
</tr>
</tbody>
</table>

![MIMOSYS](image1) ![DAAV Technologies](image2) ![Cytomec](image3) ![DIGITAL OPTIM](image4)
# Innogrants - 2006

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>LABORATORY (SCHOOL)</th>
<th>PEOPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fastree 3D</td>
<td>Processor Architecture Laboratory (IC/LAP)</td>
<td>Cristiano Niclass</td>
</tr>
<tr>
<td>Medical Imaging System</td>
<td>Biomedical Optics Laboratory (STI/LOB)</td>
<td>Alexandre Serov</td>
</tr>
<tr>
<td>Biocomposites</td>
<td>Laboratory of Composite and Polymer Technology (STI/LTC)</td>
<td>Laurence Mathieu</td>
</tr>
<tr>
<td>Molecule Modelisation</td>
<td>Processor Architecture Laboratory (External &amp; IC/LAP)</td>
<td>Payal Kapor</td>
</tr>
<tr>
<td>Attolight</td>
<td>Laboratory of Quantum Optoelectronics (SB/LOEQ)</td>
<td>Samuel Sonderreger</td>
</tr>
<tr>
<td>Jilion</td>
<td>Algorithmics Laboratory (IC/ALGO)</td>
<td>Zeno Crivelli</td>
</tr>
<tr>
<td>Inocs</td>
<td>Integrated Systems Laboratory(STI/IC)</td>
<td>Srinivasan Murali</td>
</tr>
<tr>
<td>RouteRANK</td>
<td>Laboratory for Computer Communications and Applications (IC/LSA2)</td>
<td>Jochen Mundinger</td>
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## Innogrants - 2007

<table>
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<tr>
<th>PROJECT</th>
<th>LABORATORY (SCHOOL)</th>
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<tbody>
<tr>
<td>Prediggo</td>
<td>Artificial Intelligence Laboratory (IC/LIA)</td>
<td>Vincent Schickel</td>
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<tr>
<td>Enairys</td>
<td>Industrial Electronics Laboratory (STI/LEI)</td>
<td>Sylvain Lemofouet</td>
</tr>
<tr>
<td>Gliapharm</td>
<td>Laboratory of Neuroenergetics and Cellular Dynamics (SV/LNDC)</td>
<td>Luc Pélerin</td>
</tr>
<tr>
<td>Optimax (logistics and the internet)</td>
<td>Artificial Intelligence Laboratory (IC/LIA)</td>
<td>Adrian Petcu</td>
</tr>
<tr>
<td>Gaiasens</td>
<td>Environmental Fluid Mechanics Laboratory (ENAC/EFLUM)</td>
<td>Olivier Couach</td>
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<tr>
<td>Lemoptix</td>
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<td>Stereotools</td>
<td>Signal Processing Laboratory 5 (STI/LTS5)</td>
<td>Jean-Philippe Thiran</td>
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![Logos](prediggo.png)
![Logos](enairys.png)
![Logos](gliapharm.png)
![Logos](lemoptix.png)
![Logos](gaiasens.png)
![Logos](stereotools.png)
## Innogrants - 2008

<table>
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<tr>
<th>Project/Innogrant</th>
<th>Laboratory (School)</th>
<th>People</th>
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<tbody>
<tr>
<td>DB4all</td>
<td>Database Laboratory (IC/LBD)</td>
<td>David Portabella</td>
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<td>Social Web Browsing</td>
<td>Operating Systems Laboratory (IC/LABOS)</td>
<td>Rodrigo Schmidt</td>
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<td>Laboratory of Advanced Semiconductors for Photonics and Electronics (SB/LASPE)</td>
<td>Eric Feltin</td>
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<td>ExCellness</td>
<td>Laboratory of Cell Biophysics (SB/LCB)</td>
<td>Pierre-Jean Wipff</td>
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<td>Aïmago</td>
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<td>Michael Friedrich</td>
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<td>Aleva Neurotherapeutics</td>
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<td>Andre Mercanzini</td>
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<td>Antispam and filtering methods</td>
<td>Laboratory for Computer Communications and Applications (IC/LSA2)</td>
<td>Slavisa Sarafijanovic</td>
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<td>Madeinlocal</td>
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<td>Manuel Acevedo</td>
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## Innogrants - 2009

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<td>Minsh</td>
<td>Distributed Systems Laboratory (IC/LSR)</td>
<td>Barbara Yersin / Jonathan Maim</td>
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<td>Ozwe</td>
<td>Pedagogical Research and Support (CRAFT)</td>
<td>Frédéric Kaplan</td>
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<td>Wippso</td>
<td>Institute of Electrical Engineering (STI/IEL)</td>
<td>Marco Mattavelli</td>
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<tr>
<td>Anti-tumour Agents</td>
<td>Laboratory of Glycochemistry and Asymmetric Synthesis (SB/LGSA)</td>
<td>Claudia Bello</td>
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<tr>
<td>Imina</td>
<td>Robotic Systems Laboratory 2 (STI/LSRO2)</td>
<td>Guillaume Boetsch / Benoit Dagon / Christophe Canales</td>
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# Innogrants - 2010

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<td>Bastien Rachet</td>
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<td>Lake Mind Cloud Management</td>
<td>Operating Systems Laboratory (IC/LABOS)</td>
<td>Jean-Philippe Martin Flatin</td>
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<td>Abionic</td>
<td>Microsystems Laboratory 4 (STI/LMIS4)</td>
<td>Nicolas Durand</td>
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<td>Samantree</td>
<td>Laboratory of Physical Chemistry of Polymers and Membranes (SB/LCPPM)</td>
<td>Davor Kosanic</td>
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<td>BugBuster</td>
<td>Operating Systems Laboratory (IC/LABOS)</td>
<td>Olivier Crameri / John Renault</td>
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<td>PROJECT</td>
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<tr>
<td>Mindmaze</td>
<td>Laboratory of Cognitive Neuroscience (SV/LNCO)</td>
<td>Tej Tadi</td>
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<td>Therapeutics for ALS</td>
<td>Polymers Laboratory (STI/LP)</td>
<td>Harm-Anton Klok</td>
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<td>L.E.S.S. - Nanofiber illuminator</td>
<td>STI Scientists Group(STI/GR-STI)</td>
<td>Yann Tissot &amp;</td>
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<td>Simon Rivier</td>
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<td>Swiss to 12</td>
<td>Laboratory of the Physics of Nanostructured Materials(SB/LPMN)</td>
<td>Alessandro Macor &amp;</td>
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<td>Emile de Rijk</td>
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<td>KB Medical</td>
<td>Robotic Systems Laboratory 2 (STI/LSRO2)</td>
<td>Philippe Bérard &amp;</td>
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<td>Szymon Kostrzewski</td>
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<td>Azbooka</td>
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<td>Evgeny Miljutin</td>
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## Innogrants - 2012

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<td>Robotic Systems Laboratory 1 (STI/LSRO1)</td>
<td>Ricardo Beira</td>
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<tr>
<td>Cellestia Biotech</td>
<td>Prof. Radtke’s Unit (SV/UPRAD)</td>
<td>Rajwinder Lehal</td>
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<tr>
<td>Osmoblue</td>
<td>Microsystems Laboratory 4 (STI/LMIS4)</td>
<td>Elodie Dahan</td>
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<td>Faceshift</td>
<td>Computer Graphics and Geometry Laboratory (IC/LGG)</td>
<td>Thibaut Weise</td>
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<tr>
<td>Nanolive - super-resolution microscopy</td>
<td>Group Depeursinge (STI/GR)</td>
<td>Yann Cotte</td>
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<tr>
<td>Morphotonix</td>
<td>Microsystems Laboratory 1 (STI/LMIS1)</td>
<td>Shenni Xie &amp; Vaida Auzelyte</td>
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<td>Laboratory of Advanced Semiconductors for Photonics and Electronics (SB/LASPE)</td>
<td>Nasser Hefyene</td>
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<td>SmartCardia</td>
<td>Embedded Systems Lab. (STI/ESL)</td>
<td>Srini Murali</td>
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<td>Shoelace Wireless</td>
<td>Laboratory of Algorithmic Research on Networked Information(IC/ARNI)</td>
<td>Lorenzo Keller</td>
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**About some Innogrants**

2012

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**EPFL Innogrants | 2018**
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<tr>
<td>Playfulvision</td>
<td>Computer Vision Laboratory (IC/CVLAB)</td>
<td>Horesh Ben Shitrit</td>
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<td>L'IDIAP Laboratory (STI/LIDIAP)</td>
<td>Joan Isaac Biel</td>
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<td>Lunaphore</td>
<td>Microsystems Laboratory 2 (STI/LMIS2)</td>
<td>Ata Tuna Ciftlik</td>
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<td>Industrial Electronics Laboratory (STI/LEI)</td>
<td>Simon Delalay &amp; Nicolas Cherix</td>
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<td>Cristian Zamfir</td>
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<td>Brain &amp; Mind Institute (SV/BMI)</td>
<td>Vincent Delattre</td>
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<td>Gael Farine &amp; Conor Slater</td>
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<td>Robert Meissner</td>
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<td>Xsensio</td>
<td>Nanoelectronic Devices Lab (STI/NANOLAB)</td>
<td>Esmeralda Magally</td>
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<td>Data-Intensive Applications and Systems Lab. (IC/DIAS)</td>
<td>Miguel Branco</td>
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<td>Cloud Storage</td>
<td>Image and Visual Representation Laboratory (IC/IVRG)</td>
<td>T. Lochmatter, R. Achanta</td>
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<td>Biosemic</td>
<td>Laboratory of the Physics of Living Matter (SB/LPMV)</td>
<td>Wiktor Lisowksi</td>
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<td>Lucentix</td>
<td>Laboratory of Protein Engineering (SB/LIP)</td>
<td>Rudolf Griss &amp; Alberto Schena</td>
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<td>Intento</td>
<td>Chair in Non-invasive Brain-machine Interface (STI/CNBI)</td>
<td>Andrea Maesani &amp; Andrea Biasiucci</td>
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<td>SensArs Neuroprosthetics</td>
<td>Translational Neural Engineering Laboratory (STI/TNE)</td>
<td>F. Petrini, S. Raspopovic, M. Capogrosso</td>
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<td>Sun Biosciences</td>
<td>Laboratory of Stem Cell Bioengineering (SV/LSCB)</td>
<td>Sylke Hoehnel &amp; Nathalie Bradenberg</td>
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<td>Graspeo</td>
<td>Real-Time Coordination &amp; Dist. Interact. Syst. (STI/REACT)</td>
<td>Andrii Vozniuk</td>
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<td>Dependable Systems Laboratory (IC/DSLAB)</td>
<td>L. Gardiol, A. Chamseddine &amp; S. Andrica</td>
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<td>ObViz</td>
<td>Artificial Intelligence Laboratory (IC/LIA)</td>
<td>Claudiu Musat</td>
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<tr>
<td>EAR</td>
<td>Audiovisual Communications Lab (IC/LCAV)</td>
<td>Juri Ranieri &amp; Ivan Dokmanic</td>
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**Innogrants - 2015**

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<td>Twenty Green</td>
<td>Electronics and Signal Processing Laboratory (STI/ESPLAB)</td>
<td>Mario Zaiss &amp; Duncan Sutherland</td>
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<td>Laboratory of Theoretical Physical Chemistry (SB/LCPT)</td>
<td>Alberto Hernando de Castro, Miroslav Sluc, Marius Wehrle &amp; Eduardo Zambrano</td>
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<td>Swiss Sonic Production</td>
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<td>Csaba Laurenczy</td>
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<td>Notch Enhancers</td>
<td>Laboratory of Synthesis and Natural Products (SB/LSPN) &amp; Radtke Group (SV/UPRAD)</td>
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<td>Laboratory of Virology and Genetics (SV/LVG)</td>
<td>Marc Friedli</td>
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<td>Naïk Londono, Martin Hofmann &amp; Wiktor Bourée</td>
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<td>TasteHit</td>
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<td>Daphne</td>
<td>Swiss Plasma Center (SB/SPC)</td>
<td>Mario Michan</td>
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<td>Laboratory of Applied Photonics Devices (STI/LAPD)</td>
<td>Laurent Coulot, Mathieu Ackerman, Florian Gerlich</td>
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# INNOGRANTS – 2016

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<td>FXII Inhibitor</td>
<td>Laboratory of Therapeutic Proteins and Peptides (SB/LPPT)</td>
<td>Christian Heinis, Andres McAllister</td>
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<td>Active Wearables</td>
<td>Robotic Systems Laboratory (STI/LSRO)</td>
<td>Simon Gallo, Giulio Rognini</td>
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<td>Chef’s Road</td>
<td>Operating Systems Laboratory (IC/LABOS)</td>
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<td>Martijn Bosch &amp; Adrien Bierbaumer</td>
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<td>Stem Cell Dynamics Laboratory (SV/LDCS)</td>
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<td>Nastaran Asadi Zanjani, Johann Bigler &amp; Jean-Charles Fosse</td>
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# Innogrants – 2017

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<td>Powder Technology Laboratory (STI/LTP)</td>
<td>Abhishek Kumar</td>
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<td>Petr Strnad, Andrea Boni</td>
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<td>Javier Bello Ruiz, Robin Mange</td>
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<td>Laboratory of Bioorganic Chemistry and Molecular Imaging (SB/LCBIM)</td>
<td>Aleksey Yevtodiyenko &amp; Elena Dubikovskaya</td>
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<td>Chair of Applied Statistics (SB/STAP)</td>
<td>Paulo Refinetti</td>
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<td>Luca Randazzo</td>
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INTERNET AND SOFTWARE
ELECTRONICS
OTHER HARDWARE (ROBOTICS, MECHANICS, SENSORS)
ENERGY & ENVIRONMENT
MEDICAL DEVICES & BIOTECHNOLOGY
Travel Planning

routeRANK

From: A city, airport or train station in Europe
To: A city, airport or train station in Europe
Date: 06-03-2009
Time: 08:00

Want to see how it works?
Click here to get to an example search result from Bern to Berlin.

Planning your travel is easy as 1,2,3
routeRANK integrates road, rail and air travel within Europe!
Flight information is also available for all major airports world-wide.

1. Search
   Start typing a name and choose from a list of available locations.

2. Select
   Sort the results according to what is most important to you – travel means, travel time, price, and CO2 emissions.

3. Buy
   Follow the links to travel providers’ websites where you can purchase your tickets or find more information.

Travel Green
Sort your results by CO2 emissions to find the most ecological way of travelling.
Recommendation Solution

Vincent Schickel
A Social Network
E-learning

Math Centers that Deliver — Differentiation Done Right

While you teach small groups, HappyNumbers serves as an independent math center, providing individualized instruction for the rest of the class.

I’m a Teacher
Sign in to your account or sign up for one

I’m a Student
Sign in to your account (created by your teacher)
Local Information

About some Innogrants

Internet
Chef’s Road

Food supply chain

farmer → Transport → storage → Transport → storage → consumer

Youssef El Houti, Abdelkoudouss Badou
Web Testing
Cloud Management

Value chain in public clouds

About some Innogrants

J.-P. Martin Flatin
Internet and Mobile Apps

Soon to be released!

SublimeVideo
HTML5 Video Player

Acquired by
Zeno Crivelli
Network Technologies for Mobile

Graphical Use Interface for Microcast prototype for video streaming

Lorenzo Keller
Software Applications

Complete signage solution at your fingertips

Use your content or customize our templates

Our Website

LCD Display
42" In

6 ft

At Your Locations

LCD Frame
10", 15" In

COMING SOON
[preview access]

Ion Constantinescu
Motion Capture

realtime markerless motion capture at every desk

what is faceshift

- faceshift is accurate, effortless, and affordable markerless facial performance capture.
- faceshift uses depth cameras such as Microsoft’s Kinect to animate rigs in real time.
- faceshift works seamlessly for fast facial expressions, head motions, and difficult environments.

Undisclosed acquirer rumored to be Apple
Video Tracking

About some Innograts

Software

Acquired by Second Spectrum

Horesh Ben Shitrit
Vision & Sailing

Advanced data processing algorithms and devices to help sailors win races.

1. Grab your anemobox
2. Go sailing
3. Get real-time performance diagnostic
4. Share and visualize
Figure 1: Video screening job candidates explained in four steps.
Efficient access to RAW data
Cloud Storage

Today’s cloud services

untrusted international networks

your laptop

DSL untrusted

untrusted WLAN

untrusted cloud storage provider

download upload

GCHQ

NSA
Graspeo

Share Knowledge **Privately**

Hello Graspeo!

Syncing with Peer-to-Peer
Nowy

Loïc Gardiol, Amer Chamseddine & Silvi Andrica

https://nowyapp.com/
We want to create a bridge between enhanced hearing, wearables and augmented reality. Our vision is to allow everyone, with or without hearing losses, to design and augment their auditory experience. Our technology would process the sounds recorded by microphones and video from a camera to locate sound sources, amplify what we like, silence what annoys us, and inform us about what we hear. These features require innovative signal processing that cannot be implemented on traditional HAs, which provides tools and data to augment the auditory reality of the user; they also require innovation in human-computer interfaces.
Recent advances in Artificial Intelligence, including the mixture of machine learning with Human Computation, open possibilities that were unthinkable a few short years ago. We leverage these technological gains to achieve a good accuracy in automatically extracting relevant aspects and opinions from texts. We then use this wealth of data to make quality recommendations.
Demographic dynamics and population flows:
TasteHit

Personnalisez votre boutique en ligne avec des recommandations personnalisées

Télécharger GRATUITEMENT
Loïc Baboulaz, Alexandre Catsicas, Julien Lalande, Mathieu Rudelle
Imverse

360° to 3D

www.imverse.ch
Mirrakoi

Daniel Schmitter, Zsuzsanna Püspöki, Pablo Garcia-Amorena

About some Innogrants CAD Design
Digitalization of clinical trials
INTERNET AND SOFTWARE
ELECTRONICS
OTHER HARDWARE (ROBOTICS, MECHANICS, SENSORS)
ENERGY & ENVIRONMENT
MEDICAL DEVICES & BIOTECHNOLOGY
Wearable sensing

With Feeltronix technology, sensors become imperceptible and can be worn for extended periods. Soft robotic bodies can also benefit from highly compliant integrated sensing systems.

![Image of wearable sensor on skin](image-url)
Creal3D

About some Innogrants

www.creal3d.com
Micro-Display Technologies

About some Innogants

Electronics
Edge-Lighting Devices

Light shaping by nano-structured waveguides

... as thin as a human hair

Cadmium free
Mercury free
20 µm

for energy efficient distributed illumination

About some Innogrants

Electronics
A New Computer Interface

L’ordinateur sans clavier ni souris est suisse

The Museum of Modern Art, New York
Spads – 3D Imaging

depth imaging

SPAD  CMOS  Time-of-Flight

SPAD CMOS Time-of-Flight
Predictive maintenance in harsh environments?

Optical fiber sensors + smart analytics
Xsensio

CUTTING EDGE TECHNOLOGY
LOW POWER WIRELESS SENSING AND ENERGY HARVESTING

Esmeralda Magally
Nanophotonics Spectroscopy

Samuel Sonderegger
Jean Berney
Lasers & Diodes Materials

Laser Products

AllN HEMT at High temperature

Characterizations

Processing

About some Innogrants

Electronics
New Chip Architecture
Automated Chip Design

Jason Brown
FIELDS

INTERNET AND SOFTWARE
ELECTRONICS
OTHER HARDWARE (ROBOTICS, MECHANICS, SENSORS)
ENERGY & ENVIRONMENT
MEDICAL DEVICES & BIOTECHNOLOGY
A New 3D Printer

Damien Loterie, Paul Delrot
New Vehicle

Robots to preserve life

Every day heroes are risking their lives to help others getting safe. These are firefighters and rescuers operating in natural or industrial disasters. But no one should ever be exposed to hazardous environments.

This simple and natural statement is the root of rovenso’s motivation to build robots than can take care of dangerous tasks when the job needs to get done. Earthquakes, landslides, hurricanes, fires or explosions create complex environments which are usually cluttered with rubbles and sometimes contaminated with chemicals or radiations. Manipulating or moving heavy stuff under these conditions is dangerous for humans but is also extremely challenging for automated systems.

Tomorrow, fully autonomous robots will handle these hazardous tasks for us.

http://www.rovenso.com
Photonics via Moulding

✓ Healthy
✓ Innovative
✓ Personalized

 Photonic™ chocolate
- A colourful technology to taste

 Photonic™ plastic
- Colours without additives
✓ Additive-free
✓ On 3D surfaces
✓ Mouldable articles

About some Innogrants

Photonics

Auzelyte Vaida & Xie Shenqi
Anti-Counterfeiting for Watches
Wobbe Index

Evaluation Kit

The Quantitative Energy Wobbe Index Measurement System (WIMS) can accurately measure the energy content of any Natural Gas or Biogas.

Variations in the energy content of a gas (the Wobbe Index) can lead to a mismatch in the air fuel ratio. This is the main cause of poor performance in terms of ignition, efficiency, emissions, reliability and safety of any appliance that uses the gas.

Our instrument is compact enough to be installed in most gas appliances where it can measure the Wobbe Index before the gas is burnt allowing the air fuel ratio to be adjusted correctly.
Terahertz Transmission

New sources
- from 300 kg to less than 1 kg
- from 500k CHF to 50k CHF
- but, from 100 W to 1mW (!)

Nowadays while several options can be found for sources and detectors... key point: there’s a lack of technical solution for efficient wave-guiding (!)

This is where SWISSto12 wants to play a major role
Swiss Sonic Production

About some Innogrants

Software
INTERNET AND SOFTWARE
ELECTRONICS
OTHER HARDWARE (ROBOTICS, MECHANICS, SENSORS)
ENERGY & ENVIRONMENT
MEDICAL DEVICES & BIOTECHNOLOGY
Microbe cement. Ready to use.
Currently, we use up about 40% of world energy in building, in its construction and operations. We are dedicated to developing special additive for sustainable construction and economics. Secondly, we are combining nanotechnology to use the waste materials to bring down the energy demand in building operations such as heating and cooling. Also, with some materials we are developing, we would like to make energy conversion and storage as an integral part of the building, rather being just a mechanical structural unit. We would like to make construction itself more automated to reduce human involvement.

www.nanogence.com
Energy Storage via Air Compression

Clean Energy…
From time to time

Clean Conversion & Storage
Based on Compressed Air

Clean Energy…
All the time

- Sunny or Windy times:
  STORAGE = Air Compression

- Sunless & Windless times:
  DISCHARGE = Air Expansion

Sylvain Lemofouet
Energy Generation & Osmosis

28% Energy for cooling

70% Power

Waste Heat

OsmoTech Patented Technology

helbling

Win a 10-day entrepreneurship training in Boston

Fundación REPSOL

GEBERT RÜF STIFTUNG

About some Innogrants

Energy
Upcoming changes in the electricity production structure

Future situation: better grid quality and stability is achieved through the use of power converters and appropriate control strategies (smart-grid approach)
Daphne Technology

Marine Air Pollution Control Opportunity
About some Innogants

Energy - environment
Thinkee

Knowledge base

Consumption Monitoring

Home

Apartment

Source

Actuators

iLoads

Environment informations

Source

Actuators

iLoads

Environment informations

About some Innogrants

Electronics

Nastaran Asadi Zanjani, Johann Bigler & Jean-Charles Fosse
Lironix

Smart Windows
For Building Integrated Photovoltaics (BIPVs)
GRZ Technologies

Claudio Ruch & Noris Gallandat
INTERNET AND SOFTWARE
ELECTRONICS
OTHER HARDWARE (ROBOTICS, MECHANICS, SENSORS)
ENERGY & ENVIRONMENT
MEDICAL DEVICES & BIOTECHNOLOGY
Microelectrodes for Neuro-Diseases

A size comparison between an existing lead and Aleva’s technology
Tools for Neurosurgery
Mechanical Robot for Surgery
Haptic Robot for Surgeries

About some Innogrants

Medtech
Helping paraplegic patients walk again
Intento

Movement controller (knob)

Allows all patients to benefit from CIMT

Andrea Maesani & Andrea Biasiucci
Amputee Feels in Real-Time with Bionic Hand

05.02.14 - Dennis Aabo Sørensen is the first amputee in the world to feel sensory rich information – in realtime – with a prosthetic hand wired to nerves in his upper arm. Sørensen could grasp objects intuitively and identify what he was touching while blindfolded.

About some Innogrants

Medtech
Remote Cardiac Monitoring

About some Innogrants

Medtech
EEG Buds

Neurological Disorders
A global disease burden

50 million people suffer from epilepsy
62 million people suffer from cerebrovascular disease
326 million people suffer from migraine
244 million people suffer from Alzheimer disease and other dementias.

Naik Londono
Leonardo DiCaprio Invests in Emotion-Capture Startup MindMaze

Switzerland-based human computing interfaces startup MindMaze has attracted an investment from none other than Leonardo DiCaprio, who is also joining the company’s board of advisors. The investment is being made as part of a new round of funding that hasn’t closed, and the amount of money DiCaprio is investing wasn’t revealed as part of the announcement.
Medical Imaging System

FluxEXPLORER™
Microvascular imaging

before occlusion  during occlusion  after occlusion

Laser Doppler Perfusion
LOW  |  HIGH
Medical Imaging System

Visualizing Microcirculation

Acquired by Novadaq

About some Innogrants | Medtech
Active Wearables

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Medtech

Temperature

Force

Vibration

Simon Gallo, Giulio Rognini

EPFL Innogrants | 2018
Optics for Endoscopy

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Medtech
Super-Resolution Microscopy

Angular beam scanning holographic microscopy

Yann Cotte
Fatih Toy

Low phototoxicity,
fast multi-position imaging, easy sample mounting

In vivo model systems
mouse
zebrafish
c.elegans

brain
retina
intestinal

In vitro models (organoids)

www.viventis-microscopy.com
EmbryoS

EmbryoSpin

Embryo morphology
Microscopy

Embryo endogenous chemistry
NMR

Future
Selection

Qualitative inspection

EmbryoS
Spin probes

Marco Grisi, Marc Conley
Microfluidics & Allergies

Nicolas Durand

About some Innogrants

Medtech
**Lunaphore**

Fig. 1. Design of the Microfluidic Tissue Processor

Fig. 2. Photographs of the device and the assembled system.
Lumendo (fka Lumigbo)

Andreas Schmocker
Azadeh Khoushabi
Oriane Poupard
Retina Imaging

- Pathology
  - AMD
  - Diabetic retinopathy
  - Glaucoma

- Early microscopic symptoms:
  - Cell density decrease
  - Neovascularure

- Macroscopic symptoms:
  - Pressure
  - Bleeding
  - Oedema
  - Impact on vision

Better treatment
New drugs
Monitoring

Timothé Laforest, Dino Carpentras, Mathieu Kunzi
VascuSafe

1. Femoral artery

2. cerebral artery
   vasospasm

3. VascuSAFE

4. spasm released

Guillaume Petit-Pierre, Marc Boers

About some Innogrants

Medtech
mano

Artificial Tendon

Luca Randazzo

About some Innegrants Medtech
Biosemic

New screening diagnostic tools based on micro engineering used to develop personalized healthcare.
Impedance-driven cancer medicine

Cancer patient

Tumor fragments

Direct transfer to wells

1 day drug-perfusion

On-line electric measurements

Bio-impedance Z

Time

Personalized therapy

Electric measurements drive therapy design

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Cancer therapy

Robert Meissner
Handheld optical reader for diagnostic test strips
Dispencell

Georges Muller & David Bonzon

About some Innogrants

Medtech
Cell Culture Platform
Personalized medicine
Volumina

About some Innegrants

Amélie Beduer & Thomas Braschler

Medtech
Cell Culture Dish Technology

Pierre-Jean Wipff

Medtech
Notch Inhibitors for Cancer Therapy

Cancer cells need Notch signaling to proliferate and metastasize

- T-ALL
- Breast Cancer

GSI are currently used in clinical phase

- Colorectal Cancer?

Differentiation

- Prostate Cancer
- Glioblastoma
- Medulloblastoma

Tumor Angiogenesis

- Tumor
Notch Enhancers

Notch Receptor

Ligand

Viktoria Reinmüller
Twenty Green

We sell a **bioactive** animal feed supplement for **sustainable**, **ecofriendly**, **respectful** animal farming, as well as expert consultancy for ad-hoc product formulations.
Coagulation Cascade

Intrinsic Pathway (surface contact)
- XIIa
- Xla
- IXa

Extrinsic Pathway (tissue factor)
- VIIa
- aPTT
- PT

Thrombin (IIa)
- Heparin (LMWH)
- Hirudin/Hirulog
- Thrombin-Fibrin Clot

About some Innogrants

Christian Heinis, Andres McAllister
ADC Imaging

Firefly + Luciferase enzyme + Luciferin → Light production

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Biotech
Microbiome Diagnostics

Stool Sample → Extracted DNA → Quantitative profile