EU funding and opportunities for global partnerships: Visit UNM – March 5th, 2018
Agatha Keller | EU GrantsAccess | www.grantsaccess.ethz.ch
EU GrantsAccess is...

- The office for International Research Programmes

- A joint office of the University of Zurich and ETH Zurich since 1997.

- At the University of Zurich a division of the Vice President for Veterinary Medicine and Science, Prof. Michael Schaepman

- At ETH Zürich part of the Office of the Vice President Research and Corporate Relations, Prof. Detlef Günther.
UZH at a Glance

History
1525 Theological college founded by Ulrich Zwingli
1833 Foundation of Universitas Turicensis
1998 UZH an autonomous legal entity

UZH Today – Switzerland’s largest University
• More than 25‘000 students
• 7 faculties and 130 institutes
• 5000 researchers and teaching staff
  including more than 500 full professors
UZH: Sources of Funds

Project Funding / Third Party Funds (in CHF millions)

2010

- 100 from federal organizations in Switzerland (e.g. Swiss National Science Foundation)
- 21 from abroad
- 81 from the private sector and private individuals

2016

- 163 from federal organizations in Switzerland (e.g. Swiss National Science Foundation)
- 26 from abroad
- 104 from the private sector and private individuals

Total Income

In 2016, UZH registered a total income of:

1361

CHF m

Economic Benefits

According to a LERU study, UZH generated CHF 4.9 million of added value and 41,500 jobs.

Source: UZH Annual Report 2016
UZH: Internationality as a Factor of Success

International agreement:

- 1500 research, teaching & exchange agreements
- 5075 national & international cooperations

Source: UZH Annual Report 2016
ETH Zurich at a glance

Founded 1855
Driving force of industrialisation in Switzerland

ETH Zurich today
One of the world’s leading universities for technology and the natural sciences
Place of study, research and employment for 26,500 people from over 130 different countries

Reasons for success:
Excellent education
Ground-breaking fundamental research
Transfer of knowledge to the benefit of society
**ETH in numbers**

- **19,800 students**, including **4,000 doctoral students** from over **120 countries**
- **500 professors**
- **21** Nobel Prize winners, including Albert Einstein and Wolfgang Pauli
  - 1 Fields Medal winner
  - 2 Pritzker Prize winners
- **CHF 1.8 billion**, comprising **CHF 1.3 billion** total contribution from the Federal Government
- **355 spin-offs** since 1996
- **90 patent applications and 200 invention disclosures** every year
- **9th** in THE ranking
- **8th** in QS ranking
- **19th** in ARWU ranking

*Source: ETH Annual Report 2016*
**ETH: Financing and third-party funding**

### Financing 2016 (operating revenue)

- **Federal contribution**: 73%
- **Third-party funding**: 23%
- **Self-generated revenues**: 4%

**Total**: CHF 1,768 million

### Dedicated third-party funds

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<tbody>
<tr>
<td>Swiss National Science Foundation (SNSF)</td>
<td>229</td>
<td>236</td>
<td>-6</td>
</tr>
<tr>
<td>Commission for Technology and Innovation (CITI)</td>
<td>32</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>EU Framework Programmes for Research and Innovation (FP)</td>
<td>169</td>
<td>169</td>
<td>4</td>
</tr>
<tr>
<td>Special federal funding of applied research</td>
<td>24</td>
<td>28</td>
<td>-4</td>
</tr>
<tr>
<td>Industry-oriented research (private sector)</td>
<td>35</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Other project-oriented third-party funding</td>
<td>21</td>
<td>24</td>
<td>-3</td>
</tr>
<tr>
<td>Donations and bequests</td>
<td>127</td>
<td>136</td>
<td>-1</td>
</tr>
<tr>
<td><strong>Total dedicated third-party funds</strong></td>
<td><strong>638</strong></td>
<td><strong>636</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>
ETH: Internationality as a Factor of Success

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>International</th>
<th>Swiss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>498</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>Personnel</td>
<td>8143</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>PhD Students</td>
<td>3975</td>
<td>69%</td>
<td>31%</td>
</tr>
<tr>
<td>MSc Students</td>
<td>5159</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>BSc Students</td>
<td>8502</td>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Source: ETH Annual Report 2016
EU funding and opportunities for global partnerships: Horizon 2020
https://ec.europa.eu/programmes/horizon2020/

Participation of U.S.-based researchers in Horizon 2020
30 years of EU funded R&I

~average annual budget (in b€)

FP1 (1984-1987) 1
FP2 (1987-1991) 1,4
FP3 (1991-1994) 1,7
FP6 (2002-2006) 4,4
FP7 (2007-2013) 7,2
Horizon 2020 (2014-2020) 10

EU-US S&T Agreement in 1998
EU funding and opportunities for global partnerships: Horizon 2020
https://ec.europa.eu/programmes/horizon2020/
Horizon 2020 – Participation % of all 3rd countries
Horizon 2020 - Outlook 2018-2020
After nearly 4 years of implementation

Interim Assessment

✓ An attractive, simplified and well-performing €77 billion programme, but underfunded (12% success rate)
✓ On track to deliver value for money and to meet its knowledge-creating objectives
✓ Strong EU Added Value through unique opportunities, competition & access to new knowledge.

Participation (Oct. 2017)

✓ 15,000 grant agreements
✓ with €27 billion EU contribution
✓ 65,000 participations
Examples of areas inviting US cooperation (US Flagships) Work Programme 2018-2020

- Marine Arctic
  - All Atlantic Ocean Alliance
  - Cryosphere and risks

- Health
  - Mutual Opening for US
  - Multilateral cooperation

- Transport
  - Road automation
  - Aviation – green and safe

- Energy
  - Renewable fuels

- Nano Safety
  - Regulations
  - Safe Design
EU - US Flagship cooperation examples

Automated Vehicles:
Call in 2019
30 million € funding
Specifically mentioned for EU-US project twinning with US entities participating in projects funded by the US Department of Transport
Additional countries invited

Nano-Safety:
Call in 2018
28 million € funding
EU-US Collaboration is strongly encouraged and all projects are expected to collaborate with similar projects under the Communities of Research of the US National Nanotechnology Initiative
Finding funding made easy.

Success story EU-US cooperation project – Global Health

Community engagement drives Ebola vaccine trial in Sierra Leone

To ensure the right person takes an Ebola trial vaccine at the right time in Sierra Leone, an EU-industry funded project is employing a combination of low-tech and high-tech community engagement strategies. Today, 450 adults and 96 adolescents are successfully enrolled in a two-stage vaccine trial.
How to find topics – open calls

Participant Portal:
Or consult Work Programmes

Each specific program within the Framework Program is defined in its Workprogram. It sets out the research objectives and topics to be addressed and defines the content of the calls for proposal to be issued.

Work Programmes 2018-2020:
Marie-Sklodowska-Curie Actions
Global Fellowships GF

GF: How does it work?

• Experienced Researcher (ER) (with PhD) applies jointly with one host institution located in a Member State or Associated Country for a research project that has an initial outgoing phase in a partner organisation in a Third Country

• Host Institution (in EU MS/AC) recruits the experienced researcher and appoints the Supervisor

• Partner Organisation (eg. US Institution) nominates a Supervisor for the ER, provides Letter of Commitment

• Partner Organisation does not sign Grant Agreement, does not recruit the researcher and does not claim costs

Next Call opens April 12th, 2018 – Deadline September 12th, 2018
European Research Council: ERC grants in brief

Fund ground-breaking, high gain/high risk research

ERC grants are awarded through open competition to projects headed by starting and established researchers, irrespective of their origins, who are working or moving to work in Europe. The sole criterion for selection is scientific excellence. The aim here is to recognise the best ideas, and confer status and visibility on the best brains in Europe, while also attracting talent from abroad.
European Research Council (ERC) and the USA (example Horizon 2020)

ERC evaluated proposals by researchers of US nationality, by scheme and domain

<table>
<thead>
<tr>
<th></th>
<th>Life Sciences</th>
<th>Physical Sciences &amp; Engineering</th>
<th>Sciences and Humanities</th>
<th>TOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>StG</td>
<td>200</td>
<td>267</td>
<td>237</td>
<td>704</td>
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<tr>
<td>CoG</td>
<td>55</td>
<td>87</td>
<td>62</td>
<td>204</td>
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<tr>
<td>AdG</td>
<td>150</td>
<td>265</td>
<td>171</td>
<td>586</td>
</tr>
<tr>
<td>TOT</td>
<td>405</td>
<td>619</td>
<td>470</td>
<td>1494</td>
</tr>
</tbody>
</table>

EC-USA Implementing Arrangement
(Opportunities for US NSF grantees to temporarily join ERC teams)

Signed on 13 July 2012

Results 2012-2016 period:

1935 ERC PIs expressed interest in hosting researchers from the US.
46 scientists of US nationality visited ERC project
Opportunities for US researchers

ERC grants offer important opportunities for US researchers and innovators as well as US research institutions due to the following reasons:

- They are open to researchers from anywhere in the world.
- Principal investigators need to have a working contract at the host institution and are required to spend a minimum of 50 per cent (in case of Consolidator Grants 40%, in case of Advanced Grants 30%) of their work time on the ERC project and a minimum of 50 per cent of their work time in an EU Member State or Associated Country. They can spend the other half of their time in the US.
- Research institutions outside Europe may be eligible for funding from the grant if they host researchers who are part of the research team and essential to the project.
- They offer additional funding for principal investigators coming from outside Europe.

How to participate?

- Be a beneficiary (signing EU contract – getting money from EU)
- Research partner (without signing EU contract – bring U.S. Funding)
- Host a Marie Sklodowska Curie Fellow
- Be a Member of Advisory Board
- Serve as Expert (Evaluation of Proposals)


Become an evaluator

All research proposals submitted to H2020 are peer reviewed by independent experts.

The EU is always interested to build up its database of potential expert evaluators, including from outside Europe.

Much of the evaluation process is done remotely and is paid.

If interested in applying:

How to proceed?

- Participant Portal – Check Calls / topics

- Work Programmes:

- Host a Fellow (Marie Skłodowska Curie)

- Ask your European partners how to engage

- Ask international faculty
Useful documents:
http://www.euusscienctechnology.eu/documents
Thank you

Agatha Keller

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