Strategy & synergies in research funding at institutional level

Case study: CEITEC Masaryk University

Zlatuše Novotná
Head of Grants Office

Brussels, October 11th, 2016
Content

1 South Moravia and Regional Innovation Strategy

2 Institutional Strategy & Project Portfolio
   Phase I – Preparation for Programming period 2007-2013

3 Synergies of Cohesion and Research Funding
   Phase II – Infrastructure & capacity building 2009-2014

4 Using Synergies for current Programming Period
   Phase III – Research excellence & sustainability 2015-2020

5 Translating Synergies into Researcher’s Strategy

6 Conclusion
South Moravian Region – Introduction

- Brno – second largest city in the Czech Republic
- Self-governing region without explicit powers over research

<table>
<thead>
<tr>
<th>Inhabitants</th>
<th>Students</th>
<th>Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1 mil.</td>
<td>86,000</td>
<td>6,500</td>
</tr>
</tbody>
</table>

- 3.4% of regional GDP is invested into R&D (50% private)
- 400+ companies with own R&D
- 28% of global production of electron microscopes
- 40% of global market share of antivirus producers in the region
Generations of RIS of South Moravia

**RIS>1**
2001 - 2004
- Business incubation (startups)

**RIS>2**
2005 - 2008
- SME support
- HR for R&D and innovation

**RIS>3**
2009 - 2013
- New capacities for R&D

---

CEITEC
Strategic framework of RIS SM 2014-20 (= S3)

**MISSION**

Achieve long-term development and prosperity in South Moravia through international competitiveness

**VISION 2020**

Develop South Moravia’s innovation potential to the level of the most innovative regions in the EU (% GDP of business R&D, # ERC grants; % intl. students).

**VALUES**

Ambition
Discipline
Trust

Leadership
Ethics
Openness

Entrepreneurship
Support
Cooperation

Innovative Governance

Excellence in Science

Innovative Companies

Education

Image
Institutional Strategy & Project Portfolio
Reactive versus effective approach

- Vision, ambition, motivation
- Strategy and tactics planning
- Selecting the right and most fitting funding source – project positioning
- Check and plan possible synergies of international, national, regional and institutional initiatives
- Look for and create pan-European networks
- Use professional proposal preparation service
Phase I. of CEITEC strategy: Preparation for programming period 2007-2013
CEITEC – Central European Institute of Technology

CEITEC is a research centre in the fields of life sciences, advanced materials and technologies whose aim is to establish itself as a recognized European centre of science.

- 6 partners
- 7 research programmes
- 60 research groups
- Buildings (including parcels): 61 mil. €
- 25,000 m² of new laboratories including 10 core facilities: 105 mil. €
- Total budget: 208 mil. €

Synergy of European Funding

- European Regional Development Fund
  Investing in your future

- European Union Social Fund
  Investing in jobs and skills

- OP Research and Development for Innovation

- OP Education for Competitiveness

- SEVENTH FRAMEWORK PROGRAMME

- HORIZON 2020

- CAPACITIES

- ERC

- ESFRI
Synergy of Cohesion and Research Funding
### Example: CEITEC & SYLICA

#### Strictly complementary funding

<table>
<thead>
<tr>
<th></th>
<th>EUR (mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings (including parcels)</td>
<td>61</td>
</tr>
<tr>
<td>Equipment (core facilities and other laboratories)</td>
<td>105</td>
</tr>
<tr>
<td>Start-up grant</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>208</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EUR (mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SYLICA – FP7 Capacities (2012-2015)</strong></td>
<td></td>
</tr>
<tr>
<td>Personnel cost (incoming researchers)</td>
<td>2.7</td>
</tr>
<tr>
<td>Travel and subsistence</td>
<td>0.9</td>
</tr>
<tr>
<td>Miscellaneous cost (international conferences)</td>
<td>0.1</td>
</tr>
<tr>
<td>Indirect cost</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.928</strong></td>
</tr>
</tbody>
</table>
Example: Research Infrastructures

**ESFRI + FP7/H2020 + Czech RIs Roadmap**

**CEITEC MU Core Facilities involved in ESFRI**
- inSight: Integrating Biology
- EATRIS: European Infrastructure for Translational Medicine
- EU-BIOIMAGING

**No financial support**

**FP7-Infrastructures**
- total budget 693,000 EUR
- Bio-NMR (2010-2014)
- EAST-NMR (2009-2013)

**EU networks, open access, collaboration**

**H2020-Infrastructures**
- total budget 694,000 EUR
- iNEXT (2015-2019)
- EuBI PPII (2016-2018)
- INSTRUCT-ULTRA (2017-2019)

**Update of Czech RIs Roadmap (all 2016-2022)**
- total budget 3.8 million EUR
- ELIXIR
- CIISB
- EATRIS
- EuroBioImaging
- Nano-Micro Tech

**ESIF “OP VVV” RIs**
- ELIXIR
- CIISB
- EATRIS
- EuroBioImaging
- Nano-Micro Tech

**Operation**

**Investment**
Example: Capacity building & Widening participation and Spreading Excellence

**REGPOT**
- SYLICA
  - budget 3.9 mil. EUR
  - Synergies of Life and Material Sciences to Create a New Future (2012-2015)
  - Brain gain
  - Mobility – defined partners

**ERA Chair**
- budget 2.2 mil. EUR
  - The ERA Chair Culture as a Catalyst to Maximize the Potential of CEITEC (2014-2018)
  - Brain gain

**TWINNING**
- total budget 1.75 mil. EUR
  - BISON MEDGENET TWINFUSYON (all 2016-2018)
  - Mobility – defined partners

---

**ESIF “OP VK“**
- INBIOR
- SuPReMMe BRAINS
- EVOGEN
- PlantGPPS
  - (all 2012-2015)
  - Brain gain
  - Mobility – defined partners

**ESIF “OP VVV“**
- Hopefuly 2017-2022
  - Projects under evaluation

**Brain gain**
- Mobility – no limitation
Examples: Most prestigious research grants: FP7 + H2020 + EMBO

Pillar 1: Excellent science

FP7-ERC-StG
budget 1,9 mil. EUR
Pavel Plevka
PicoStructure (2013-2016)

H2020-ERC-CoG
budget 1,4 mil. EUR
Richard Štefl
DECOR (2013-2016)

EMBO
Installation Grants
total budget 600 000 EUR
Lukáš Trantírek (2012)
Karel Říha (2013)
Pavel Plevka (2014)
Peter Lukavsky (2014)

FP7-MSCA
total budget 892 000 EUR
6 Career Integration Grants
2 Individual Fellowships:
Alexander Petrov (2014-2016)

SoMoPro
MSCA COFUND
total budget 2 mil. EUR
11 Fellowships: Robert, Říha,
Micale, Zapražná, Manakhov,
Hritz, Jackson, Trantírková,
Foroutannejad, Khainar, Mráz

H2020-MSCA
total budget 403 000 EUR
ITN ALKATRAS (2015-2019)
RISE MICROBRADAM
(2016-2018)

Pillar 2: Societal challenges

FP7-HEALTH
total budget 815 000 EUR

H2020-HEALTH
total budget 135 000 EUR
APERIM (2015-2018)

Consortia with application partners
Using Synergies for the new Programming period 2016-2020
Phase III. (from 2016): Research excellence and sustainability

Synergy of EU and national funding

OP VVV 2014-2020

NPU II. – National sustainability programme 2015-2020

Research Infrastructures (National Roadmap update 2015-2020, OP VVV 2017-2022)
Translating Synergies into Researcher’s Strategy and Career Plans
Scientific Career Path

**PhD student**
- Absorbing experience and knowledge
- Short-time projects
- Incoming/outgoing mobility: MSCA / SoMoPro / OP VVV
- International recruitment
- Prevention of inbreeding
- H2020 team member

**PostDoc I**
- Junior Group Leader
  - Excellent research & leadership skills
  - Long-term projects
  - Installation grants – EMBO
  - ERC Starting grant, GAČR Junior
  - Flexible and preparing independent career
  - Fluctuation supports internationalization
  - Individual grants - MSCA / SoMoPro / OP VVV
  - H2020 team member

**PostDoc II**
- Start-up grant
  - Institutional brand
  - GAČR Standard
  - OP VVV
  - H2020 collaborations
  - ERC Advanced grants

**Senior Group Leader**
- Collaboration

**CEITEC PhD School**
Conclusion

- Strong, stable political commitment, RIS governance structures (→ protected space)
- Keeping strategic focus and result-orientation, using strategy to form Project portfolio
- Best people on board, professional project support service provided by the Grant Office of CEITEC MU
- Create opportunities based on researcher’s career stage
- Grants are just an instrument

Good science is the goal!
Thank you for your kind attention!

Central European Institute of Technology
Masaryk University
Kamenice 5
625 00 Brno, Czech Republic

www.ceitec.eu | zlatuse.novotna@ceitec.muni.cz