



CEITEC

Central European Institute of Technology

BRNO | CZECH REPUBLIC

The CEITEC Case: Translating Infrastructure into Capacity Development

Research and Innovation Funding: The Stairway to Excellence

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Executive Director

Budapest, Hungary, 24 May 2016



EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTING IN YOUR FUTURE



OP Research and
Development for Innovation



Aim

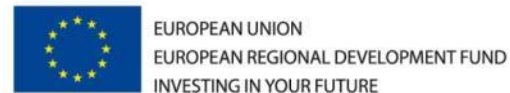
“ *CEITEC is a scientific consortium in the **fields of life sciences, advanced materials and technologies** whose aim is to establish itself as a recognized European center of science.* ”



Financing (June 2011- December 2015)

- Structural funds – European Regional Development Fund
- OP Research and Development for Innovations (Ministry of Education)

CEITEC Planned budget	EUR / USD (mil)
Buildings (including parcels)	61 / 81
Equipment (core facilities and other laboratories)	105 / 138
Start-up grant	42 / 56
Total	208 / 275





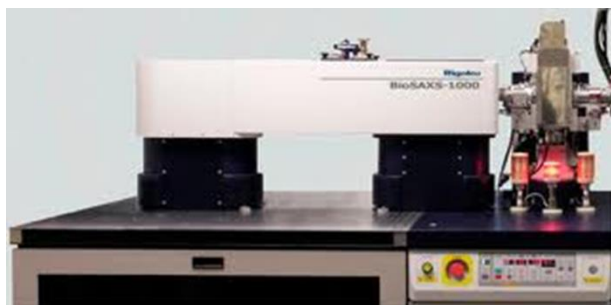
CEITEC MU Building

Core Facilities – Open Access



NMR - 950 MHz (liquid), 850 MHz (liquid), 2 x 700 MHz (liquid and solid), 600 MHz (liquid), 500 MHz (liquid and solid)

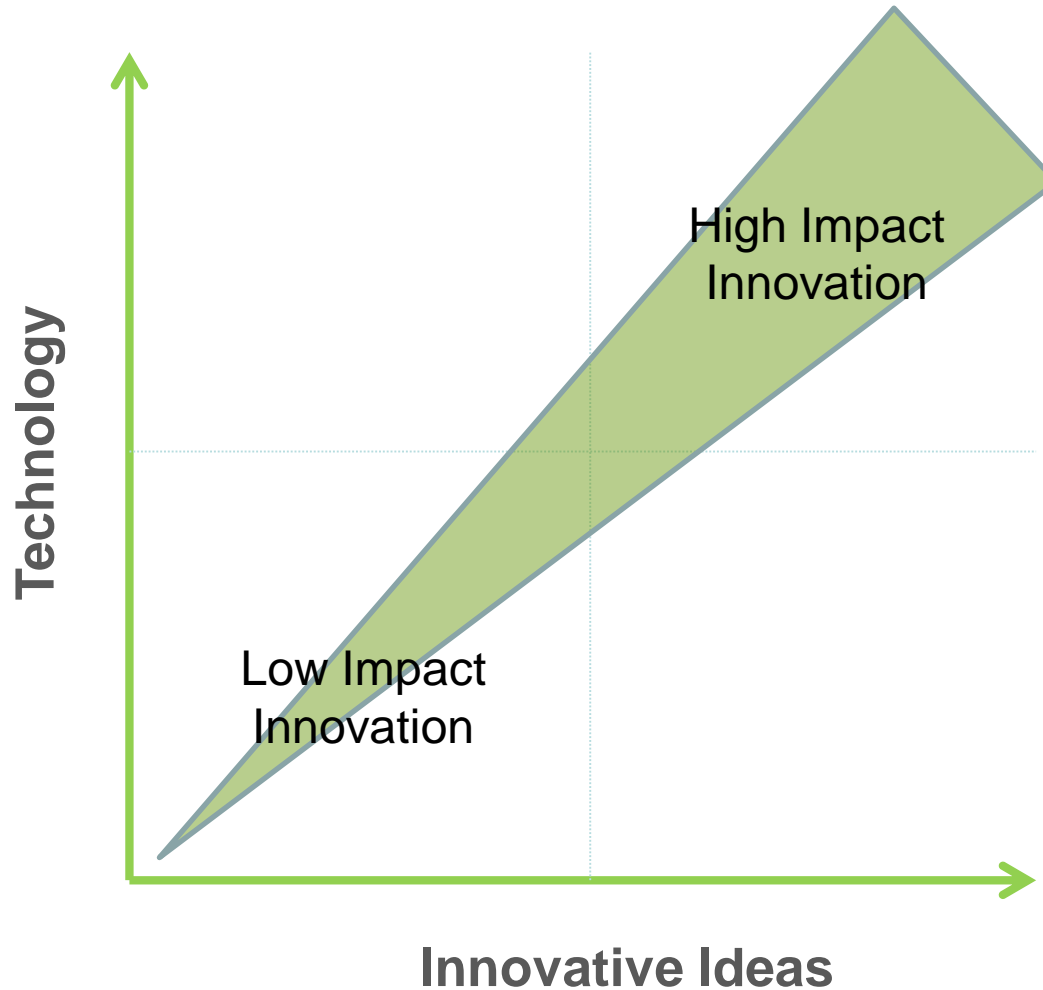
Cryo-Electron Microscopy – High-throughput FEI Titan Krios 300kV, FEI Tecnai 200kV



Single Crystal X-ray Diffraction – Rigaku BioSAXS robotized diffraction system



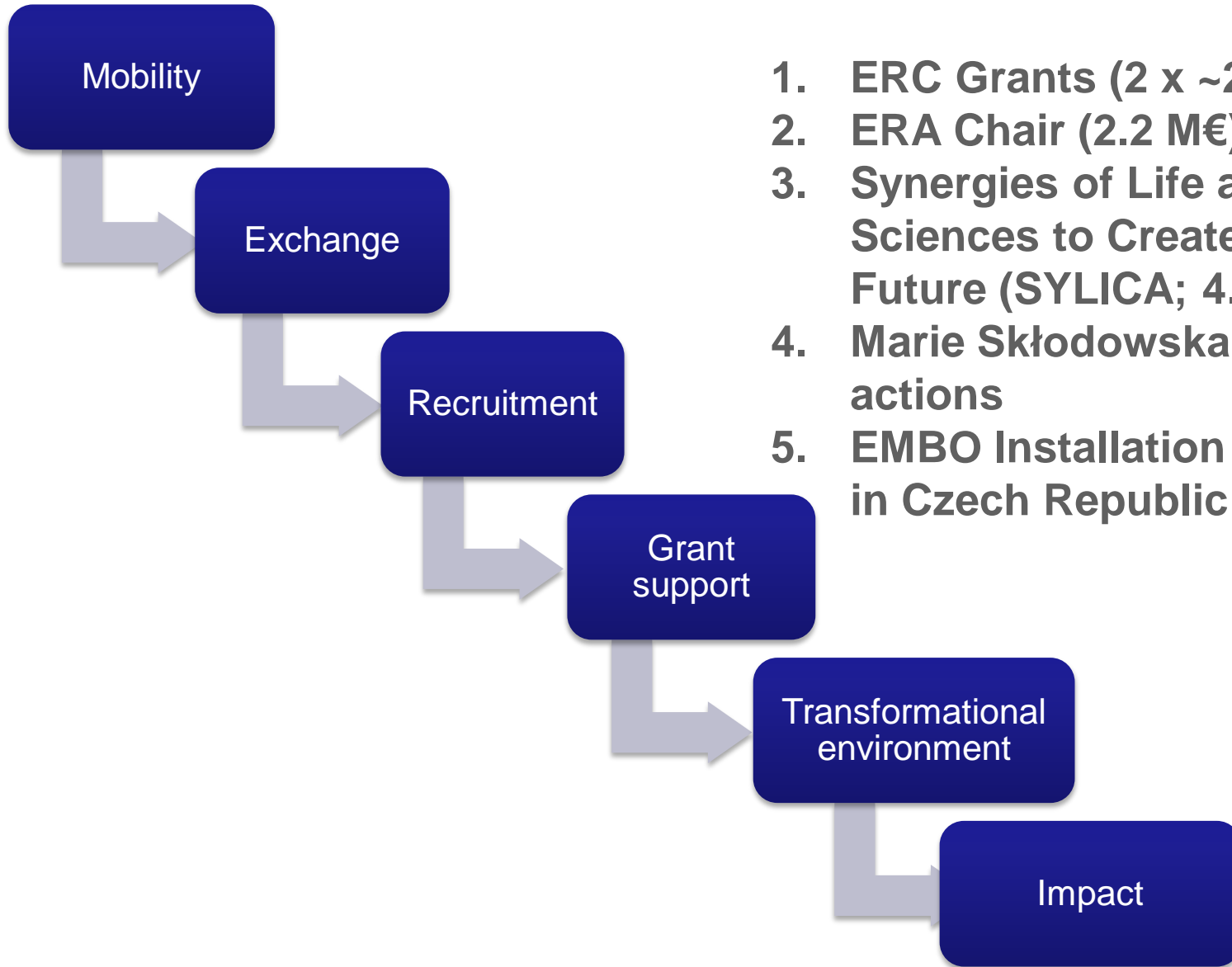
Technology and Ideas



Barriers & Obstacles to Research Excellence

- **Excellence** is not well understood
- **Governance** mechanisms are in an early development stage
- **Human capital** or skills are under appreciated
- Financing from National sources not consistent with **support for excellent practices**
- Challenges to setting and implementing **priorities**

International Funding



1. ERC Grants (2 x ~2M€)
2. ERA Chair (2.2 M€)
3. Synergies of Life and Material Sciences to Create a New Future (SYLICA; 4.4 M€)
4. Marie Skłodowska-Curie actions
5. EMBO Installation (7 out of 16 in Czech Republic)

Culture of Excellence

CEITEC's First 2 ERC Grant



Pavel Plevka



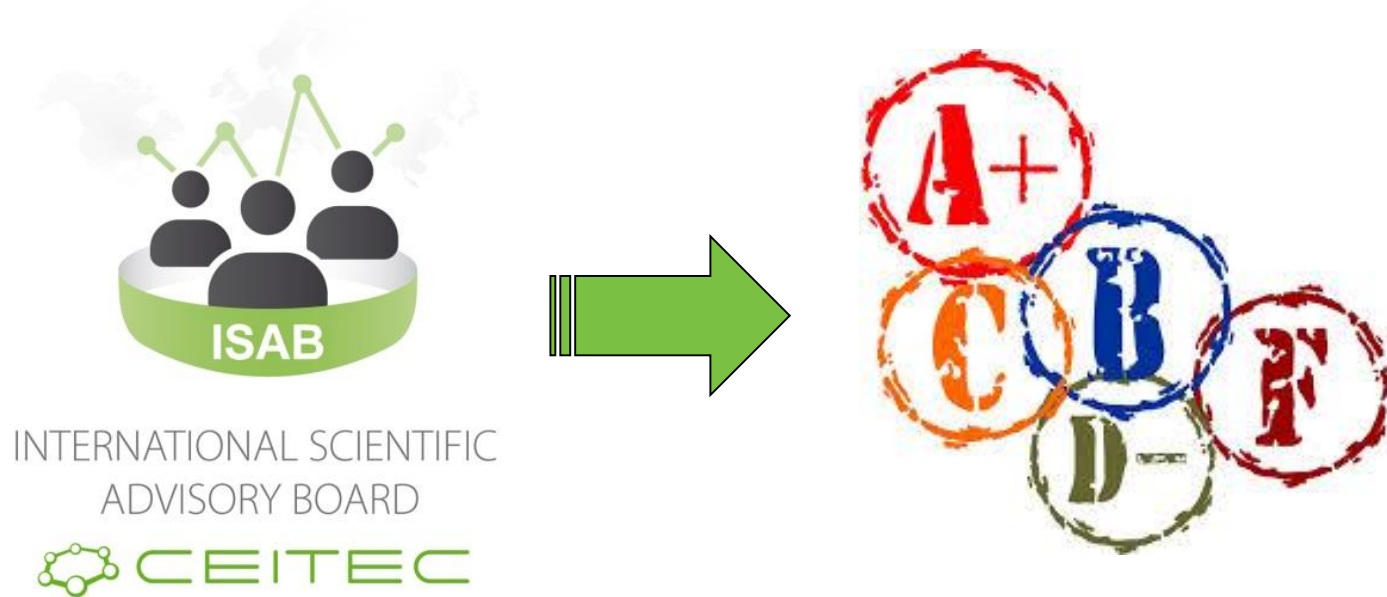
European Research Council

Established by the European Commission



Richard Stefl

Measuring Success Against Global Standards

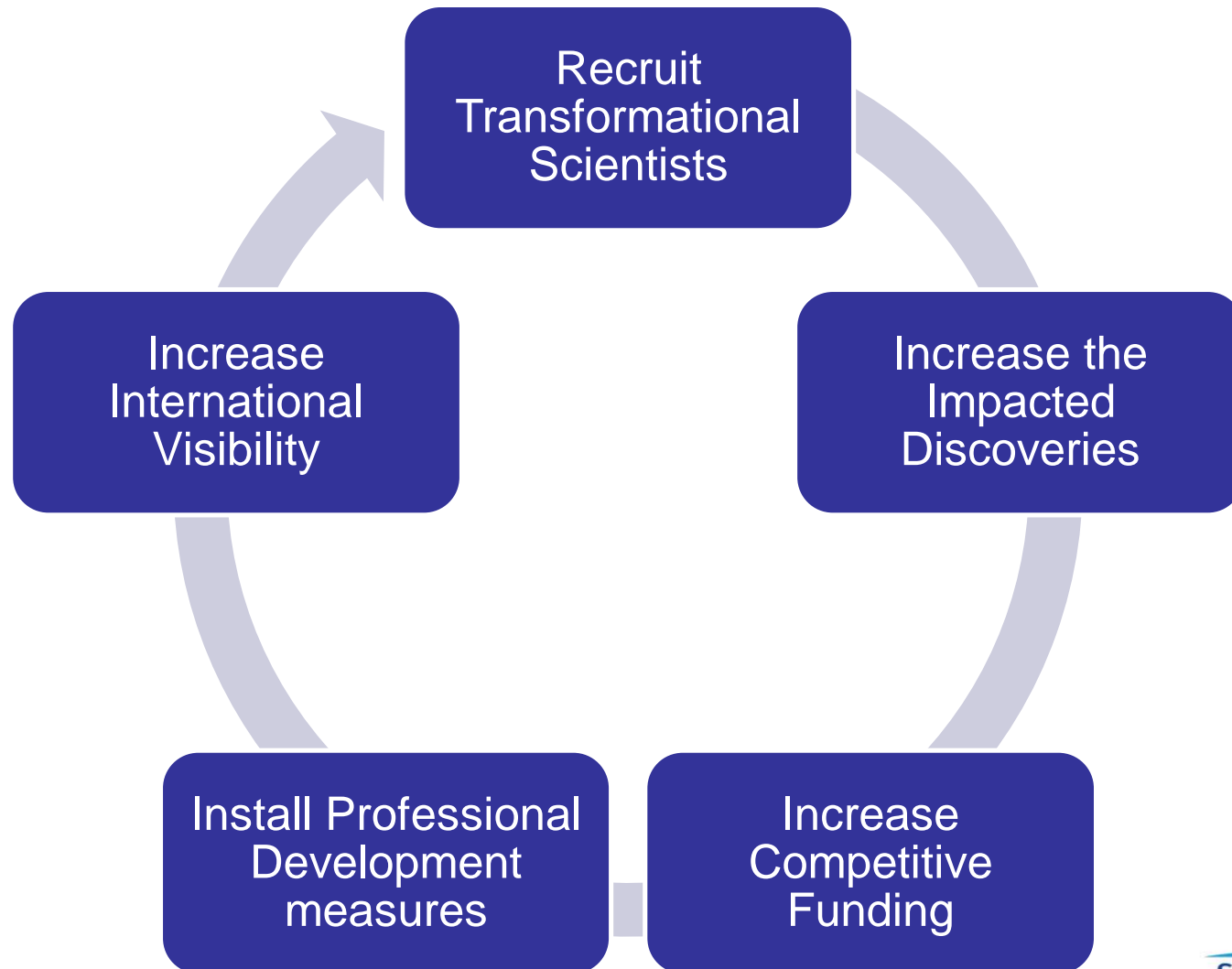


Board consists solely of Western European Members

**Evaluation Sept. 2014 based on past performance, vision plan,
and laboratory visit**

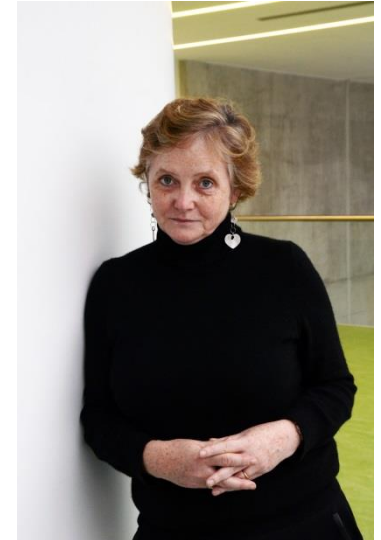
ERA Chair concept of transformation

Q2 2014 - Q2 2019



The ERA Chair Culture as a Catalyst to Maximize the Potential of CEITEC

- 6/2014 – 5/2019
- ERA Chair – Mary O'Connell
- Grants support system development
- International outreach and dissemination
- Attractive scientific environment



CEITEC Science Culture



The ERA Chair Culture as a Catalyst to Maximize the Potential of CEITEC

Attractive scientific environment

- Creating conditions for idea-driven and competitive scientific environment



HR EXCELLENCE IN RESEARCH

- After endorsement of the Charter & Code by CEITEC in 2012, CEITEC and Masaryk University aim at putting the proposed measures into practice

International Recruitment

Foreign employees

Research programme	Long-term stay			Short-term stay			TOTAL
	EU	outside EU		EU	outside EU		
	+	-	=	+	-	=	
Advanced Nanotechnologies and Microtechnologies	4	4	8	0	0	0	8
Advanced Materials	2	0	2	0	0	0	2
Structural Biology	13	3	16	29	13	42	58
Genomics and Proteomics of Plant Systems	18	3	21	1	0	1	22
Molecular Medicine	2	1	3	0	2	2	5
Brain and Mind Research	1	1	2	0	1	1	3
Molecular Veterinary Medicine	0	2	2	0	0	0	2
CEITEC administration	0	1	1	0	0	0	1
Sum total	40	15	55	30	16	46	101

Summary

- **Openness** to implement new learnings and best practice
- **Partner** with organizations represent your aspirations
- Enable **financial support** mechanisms for excellence
- **Cultural environment** favoring transformation is essential

Thank you for your attention



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