



Central European Institute of Technology
BRNO | CZECH REPUBLIC

The CEITEC Case: Translating Infrastructure into Capacity Development

The synergies with Research and Innovation Funds: The Stairway to Excellence

Markus Dettenhofer

Executive Director

Bratislava, Slovakia 24 June 2015



EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTING IN YOUR FUTURE



OP Research and
Development for Innovation



Aim

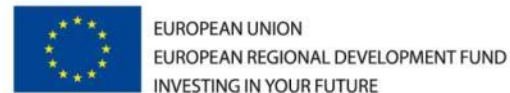
“ *CEITEC is a scientific consortium in the **fields of life sciences, advanced materials and technologies** whose aim is to establish itself as a recognized European center of science.* ”



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





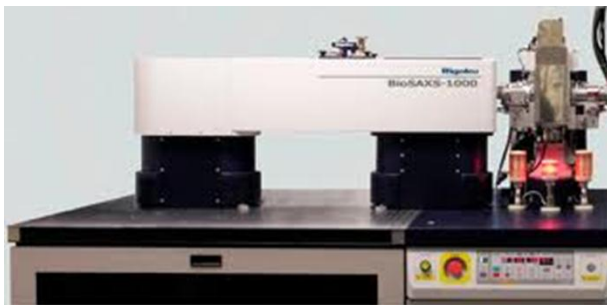
CEITEC MU Building

Core Facilities – Open Access



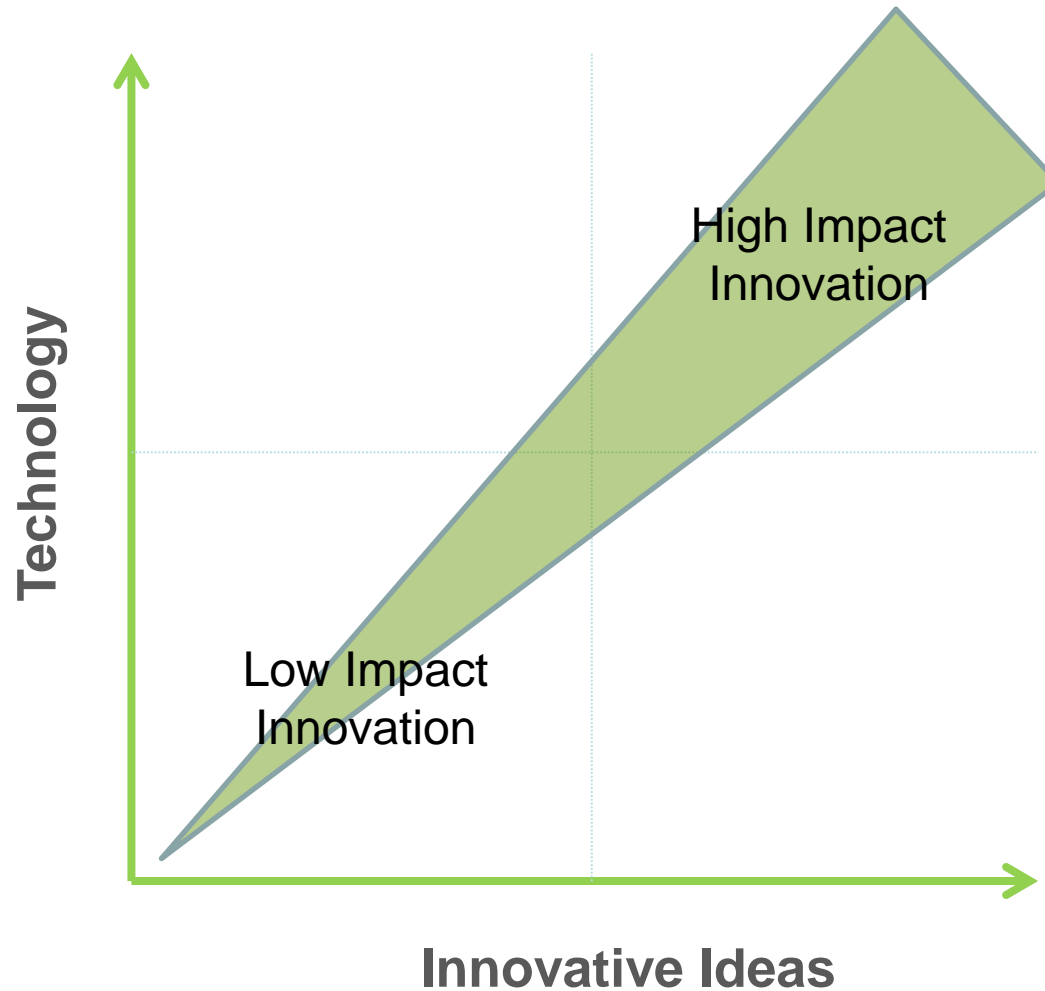
NMR - 950 MHz (liquid), 850 MHz (liquid), 2 x 700 MHz (liquid and solid), 600 MHz (liquid), 500 MHz (liquid and solid)

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



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

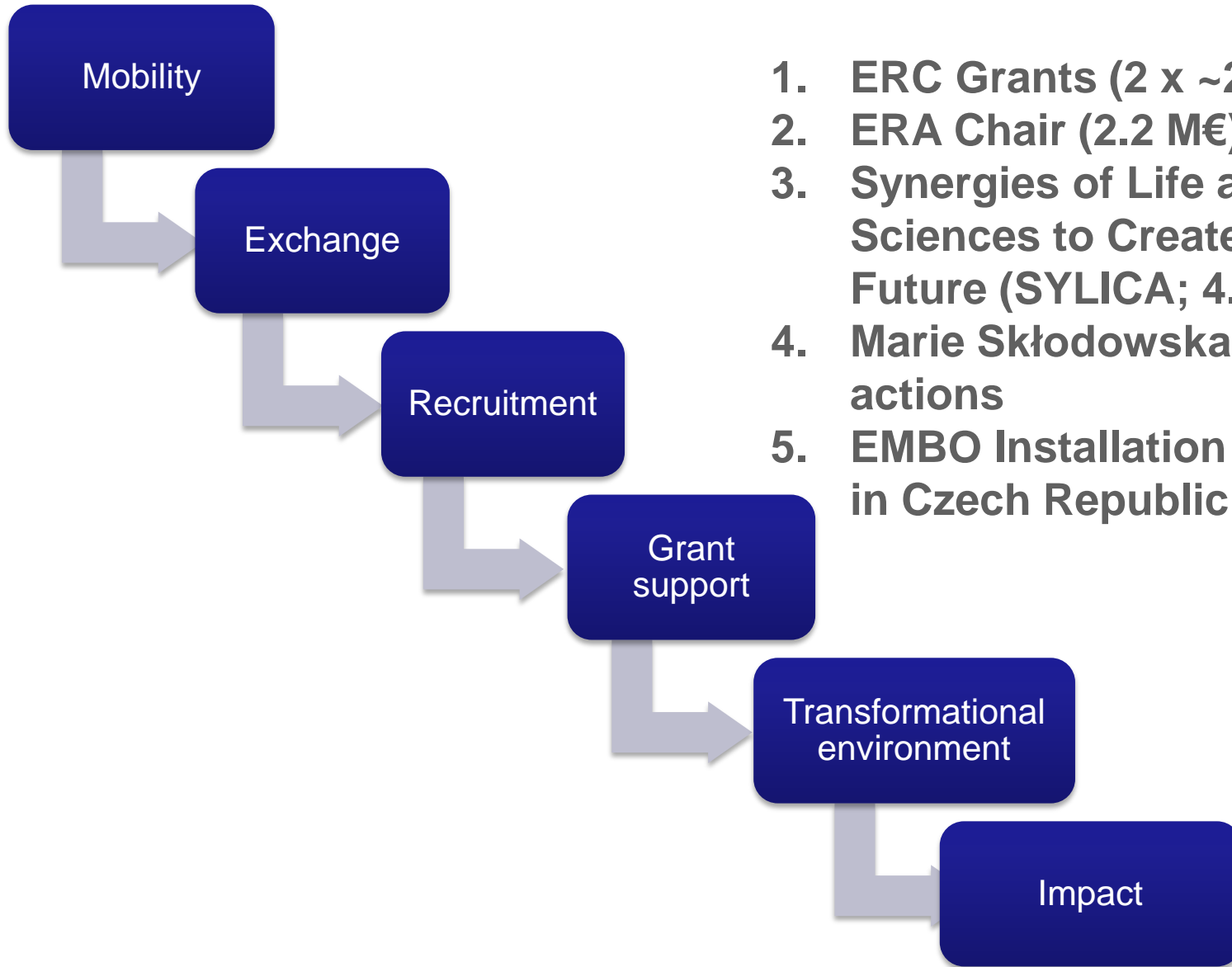
Technology and Ideas



Barriers & Obstacles to Research Excellence

- Excellence is not well understood
- Governance mechanisms are not in place
- Skills are lacking in the region
- Financing from National sources are not supporting excellent practices
- Unwillingness to set priorities
- Inability to implement a plan

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



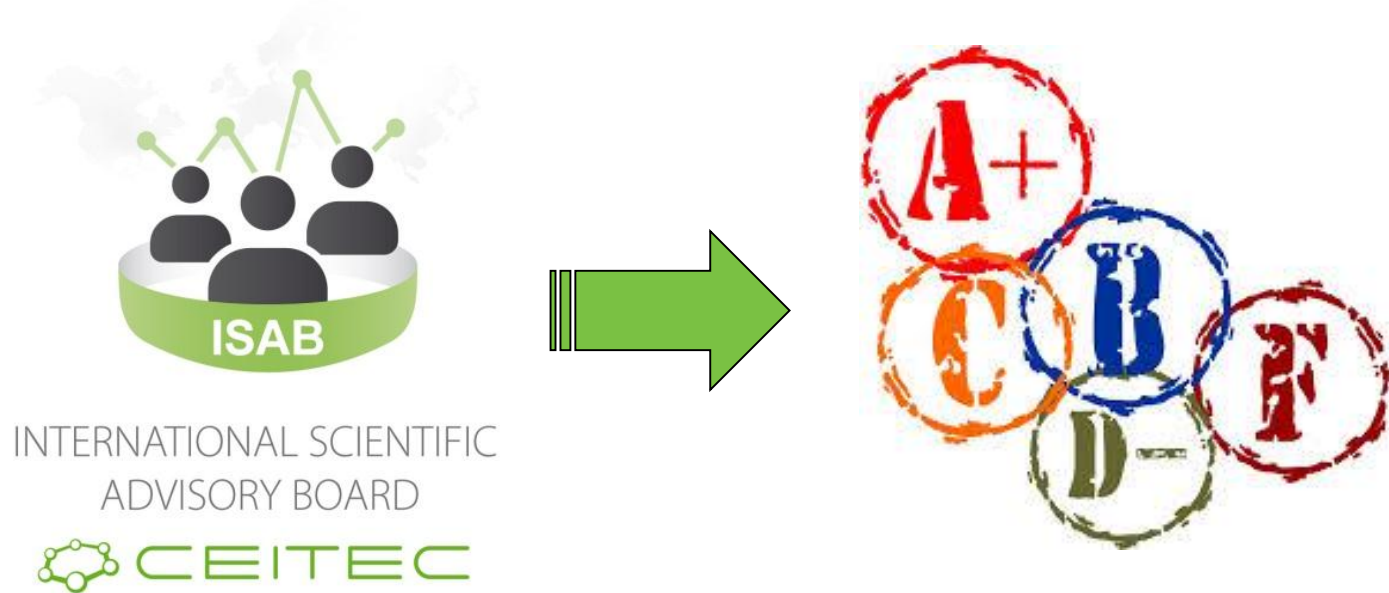
European Research Council

Established by the European Commission



Richard Stefl

Measuring Success Against Global Standards

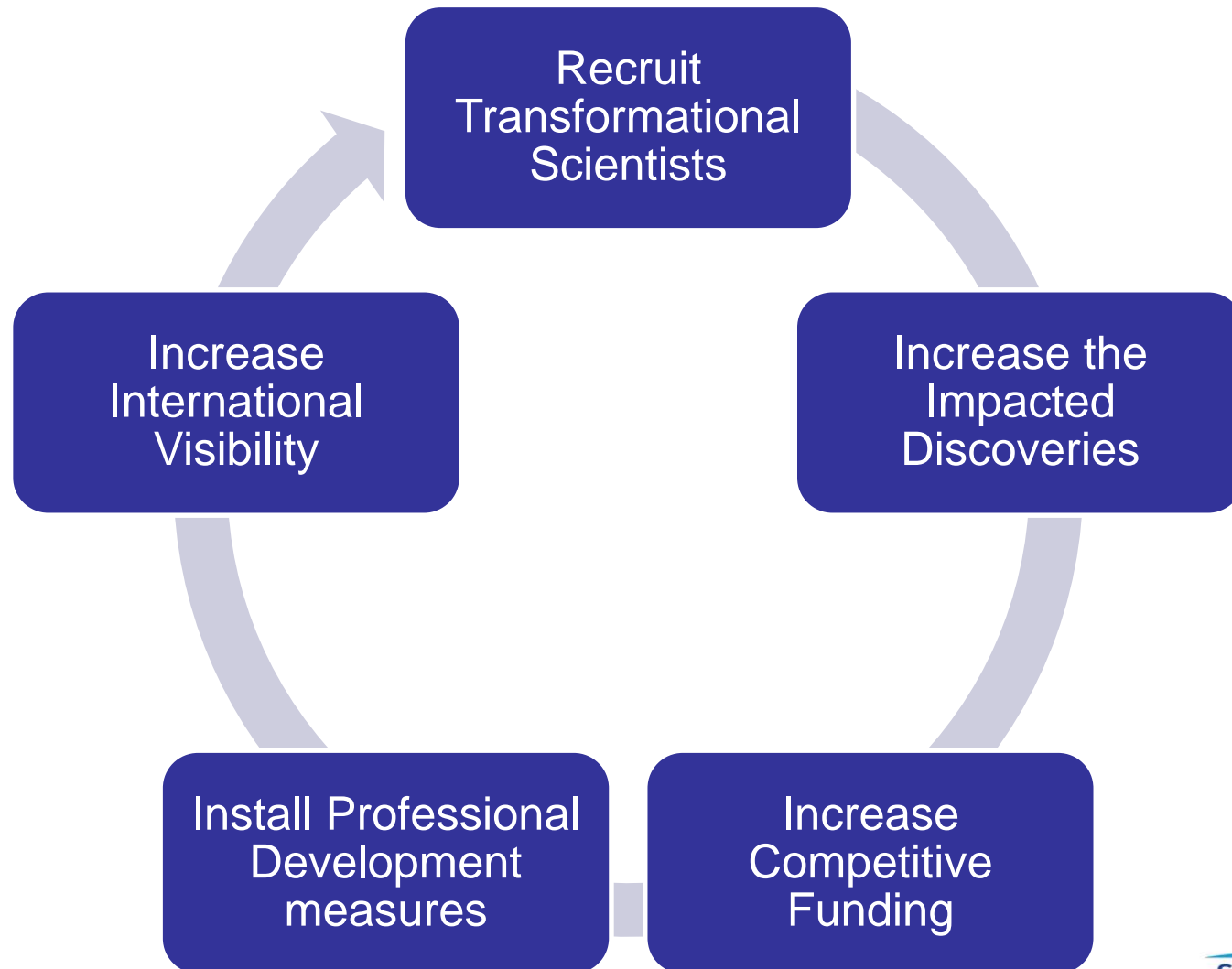


Board consists solely of Western European and US Members

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

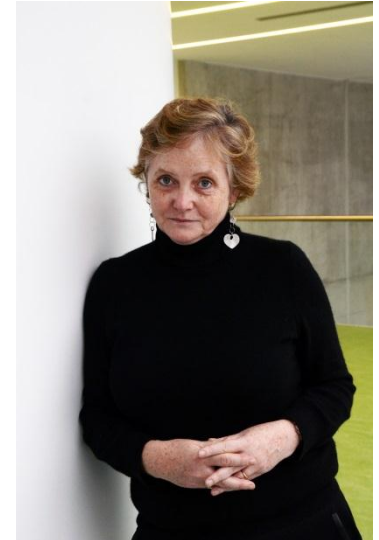
ERA Chair concept of transformation

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



Why do we want an attractive environment?



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

NIGHT OF **BETTER COOPERATION IN SCIENTIFIC RESEARCH**



cafe prah

19 | 02 | 15 18.00

(Ve Vaňkovce 1, Brno)

quick science slideshows /
cooperation set-up /
networking / discussion /
Marius Dettenhofer workshop /





SCIENTIFIC EVENTS 2015

JULY

EMBO Practical Workshop - "Analysis of non-coding RNAs: per aspera ad astra"

/ University Campus Bohunice, Brno / July 25 – 31 / Workshop

A Practical Course in Three-Dimensional Electron Microscopy

/ University Campus Bohunice, Brno / July 25 -31 / Summer School

SEPTEMBER

Frontiers in Life and Material Sciences: Creating Life in 3D

/ Brno / September 2-4 / CEITEC / ICRC Conference

EMBO Conference: Signalling in plant development

/ Hotel International Brno / September 20-24 / Conference

OCTOBER

1st Workshop on TP53 Analysis in CLL

/ Brno / October 1-3 / Workshop

15th European Congress on Clinical Neurophysiology

/ Hotel International Brno / September 30 – October 4 / Conference

Regular events:

Life Science Seminar Series

Night of Better Cooperation in Scientific Research



Summary

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

Thank you for your attention



Central European Institute of Technology
c/o Masaryk University
Žerotínovo nám. 9
601 77 Brno, Czech Republic

www.ceitec.eu | info@ceitec.cz



EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTING IN YOUR FUTURE



**OP Research and
Development for Innovation**

