

Central European Institute of Technology BRNO | CZECH REPUBLIC

5th November 2020

CEITEC MU Scientific Board Meeting



Programme of the Meeting

- Welcome new members of the board "on the board"!
- Summary 2020
- Outline for Strategic Plan 2021-2028

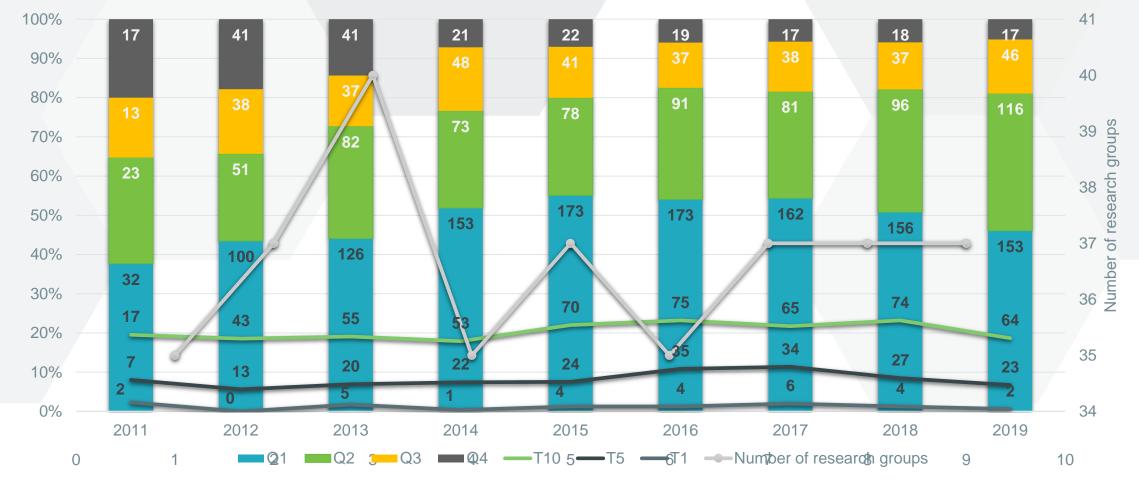


Nature Index (NI) 2019 publications

Czech institutions	Count Number of results in NI P	Share roportion of Local Authors According to the NI
Czech Academy of Sciences	423	93.24
Charles University	306	35.42
University of Chemistry and Technology, Prag	jue 38	19.76
Masaryk University	86	19.26
Palacky University	111	17.17
Silesian University in Opava	16	9.66
Czech Technical University in Prague	104	8.36
CEITEC MU	24	5.60
University of South Bohemia	22	4.37
Czech University of Life Sciences Prague	16	3.79

Publications - Productivity

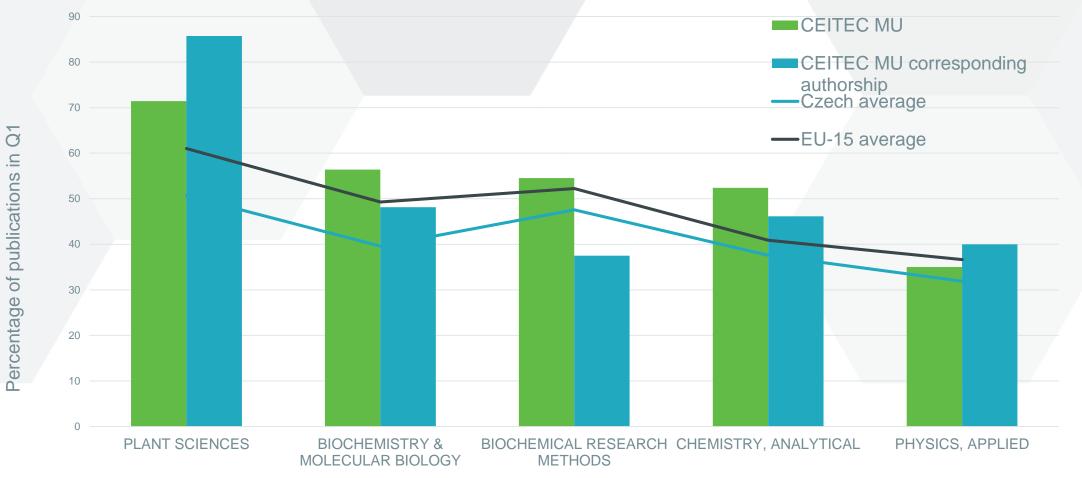
Number and Percentage of CEITEC MU Publications by Year



Research Field - Oriented Analysis

Quality of CEITEC MU Publications in Subject Categories: Percentage of

Publications in Q1 in 2019





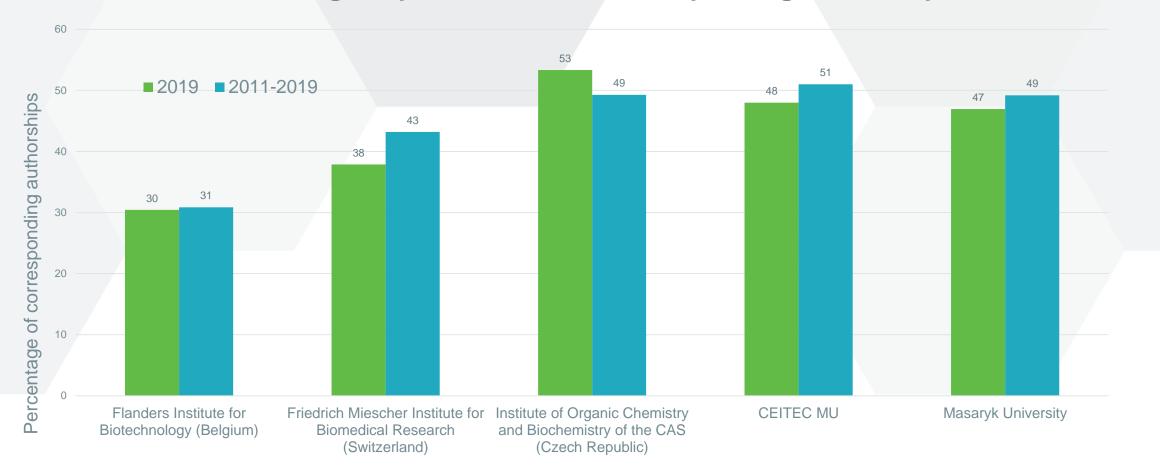
Publications - Benchmarking

Percentage of Highly Cited Papers



Publications - Benchmarking

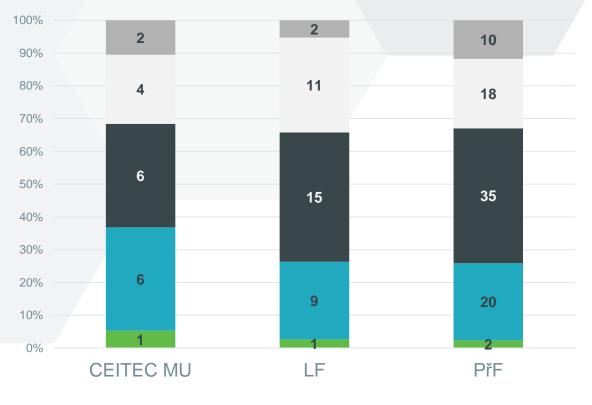
Percentage of publication with corresponding authorships





Evaluation M17+ Module 1: Quality of Selected Results

Evaluations of nebiblio results (summary of evaluation H17, H18 and H19)



■ world-leading ■ excellent ■ very good ■ average ■ below-average

Evaluations of biblio results (evaluation H19)



CEITEC PhD School



Life Sciences Programme

- process of re-accreditation in progress, Faculty of Science
- the proposal assessed by an external evaluator, supported by the Academic Senate of the faculty, expected to be approved by the Scientific Board of the faculty (end October 2020)
- implementation of re-accredited programme expected since the academic year 2021/2022

Molecular Medicine - specialization of Biomedical Sciences Programme

- accredited in December 2018, Faculty of Medicine
- first students admitted in 2020

CEITEC PhD School

QCEITEC NUNI

Concept of the Thesis Advisory Committee

CEITEC PhD School

Version: September 2020



Thesis Advisory Committee (TAC)

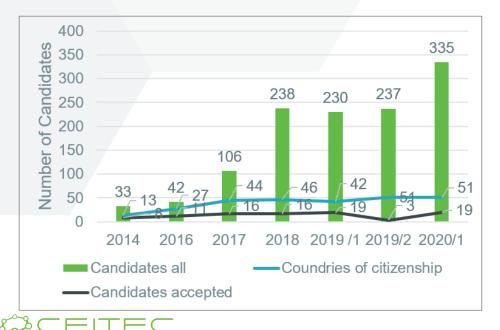
- a tool providing a comprehensive system of support and individual quality assessment for PhD students
- concept implemented since September 2019 in annual trial mode, evaluated in September 2020
- updated TAC Concept implemented since the academic year 2020/2021

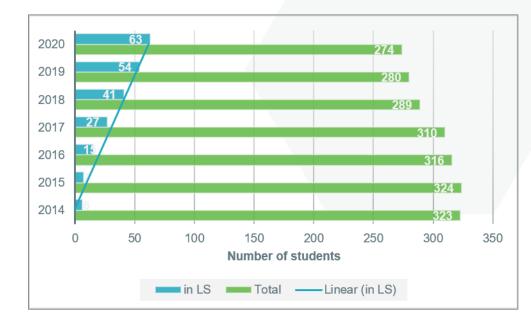
CEITEC PhD Conference

- the 1st annual PhD Conference held in February 2020
- a platform to develop students' competence in presentation skills, provide a regular assessment of students' performance, enhance the promotion of CEITEC PhD School and general networking

CEITEC PhD School

- increasing number of candidates
- currently 63 students gender 36 F / 27 M, 44 international (69 %, 14 countries)
- three new graduates are expected in 2020
- growing proportion of CEITEC PhD School students compared to the total number of PhD students with CEITEC MU supervisor





Training

- Training activities primarily for early-stage researchers
- Reduced training offer due to a Covid-19 pandemic online forms of training
- The new concept of PhD training in the preparatory phase
- The CEITEC MU pilot mentoring programme in the preparatory phase – start in 2021
- Career development events (Life after PhD series, Company Visit)



Life after PhD with Adrian and Kate Krainer

5. 3. 2020, 13:10 - 14:10
 CEITEC, Building A35/Room 211
 Adrian Krainer and Kate Krainer
 Add to my calendar



Join us for the next session of the popular Life After PhD, and event series. This time with Adrian Krainer PhD, and Kate M. Creasey Krainer Ph.D. Professor Adrian Krainer in biochemist and molecular geneticist from the Cold Spring Harbor Laboratory. In 2019, he was awarded the Breakthrough Prize in Life Sciences for the development of an effective antisense oligonucleotide therapy for children with the neurodegenerative disease spinal muscular atrophy. Dr. Kate Krainer is a plant geneticist clear mission to promote the responsible use of science

to solve the world's global agricultural problems. Don't miss this great opportunity to meet Adrian and Kate and get some first-hand career tips from two science celebrities!



Life after PhD with Katerina Falk

mholtz-Zentrum Dresden-Rosser

12/10/2020, 10:00

ITEC MU / Kamenice 5, Brno /

Join us for the next session of the popular Life after PhD event series this time with world renowned physicita and science populariza katerina Falk, PhD. She will share with you her career path, how I combine motherhood and science, how mentoring works in science and much more.

MUNI





HR Leadership Training 📕 Training

CEITEC MU is fully aware that the quality of its research and the Institute's prosperity are dependent on the ability to attract, select, and retain... + add to my.calendar



Open Science in the Context of Research Data Management Training

12. 11. 2020, 14:00 - 16:00 Science - Masaryk University

Research Data Management and Data Management Plan (DMP) creation is becoming more and more important not only for H2020 grants proposals, but

also... + add to my calendar



Open Science in the Context of Data Management Tools | R Training
26. 11. 2020, 14:00 - 16:00
V Online
Science - Masaryk University

Proper and robust research data management can't be done without suitable tools. Probably the most important tool for this agenda in the context of... + add to my calendar

Grant Strategy

The grant strategy is based on individual research grants (according to the individual specificity of particular research groups).

- ERC
- ERC CZ
- EMBO
- GAČR Expro

Higher than national average success rate in all national grant schemes essential for continuing success of CEITEC MU.

CEITEC also has ambitions to receive institutional grants that support further development initiatives at a larger scale:

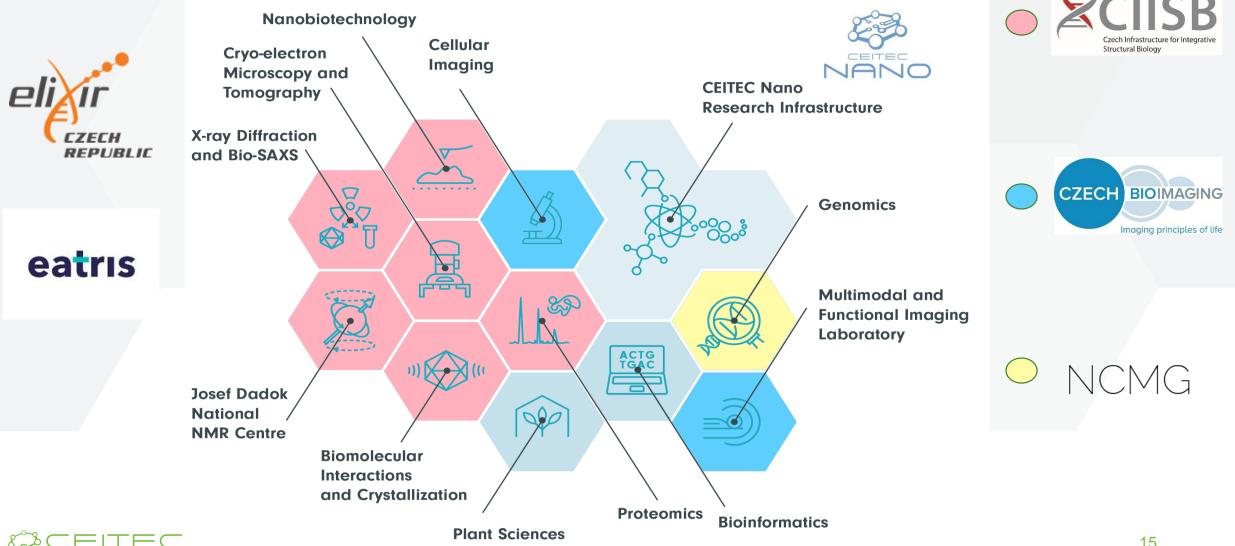
- Horizon Europe Teaming
- OP JAK



Major Grant Achievements 2020

- RG Mary O'Connell H2020-WIDESPREAD- TWINNING (as a coordinator)
- RG Panagiotis Alexiou EMBO
- - MSCA IF
- RG Lukáš Žídek MSCA RISE (as a coordinator)
- RG Pavel Plevka ERC CZ
- RG Gabriel Demo ERC CZ
- RG Robert Vácha ERC CZ
- RG Jiří Fajkus GAČR EXPRO
- RG Mary O'Connell GAČR EXPRO

Core Facilities Involvement in Research Infrastructures



Core Facilities Involvement in Research Infrastructures

- Except CF Plant Sciences and CF Bioinformatics, all CEITEC MU Core Facilities are involved in Research Infrastructures at the Czech Roadmap
- Upcoming evaluation by MEYS for funding in 2023-2029
- CF Bioinformatics will be involved under NCMG (National Centre for Medical Genomics) together with CF Genomics
- CF Plant Sciences new emerging Research Infrastructure under coordination of UPOL (Centre of the Region Haná) – Czech Plant Phenotyping Network (CzPPN)
- CEITEC is an active member of ESFRI infrastructures:





Commercial Potential of Core Facilities

- Between years 2016 2019, income from commercial activities is constantly growing
- For comparison: 3,7 mil. CZK in 2016 X 12,5 mil. CZK in 2019
- Examples of cooperation with companies:





Evaluation of Junior Group Leaders in 2020

- Heléne Robert Boisivone
- Marek Mráz



Financial Situation and Perspective 2020-2021

- End of sustainability period in 2020.
- Termination of funding via NPU project.
- Expected growth of gross institutional funding in 2021 estimated at approx. 4 % only.
- Institutional funding does not fully compensate missing NPU project.
- Missing funding approx. 25 mil. CZK will be covered by reserves of previous years.
- Number of RGs is decreasing as a result of structural change at CEITEC MU (37 in 2020, 31 in 2021).
- Primary target to keep budget of RG at stable level (cca 2-3 mil CZK/year institutional allocation).



Outline for Strategic Plan 2021 - 2028

- Procedure and planning period defined by law and MEYS requirements
- Internal procedure:
 - General introduction of the debate (RGL meeting 12.10.2020, Scientific Board 5.11.2020)
 - Per partes debates with research programmes (December 2020 January 2021)
 - Work by CEITEC MU strategy committee (January 2021)
 - Discussion with Masaryk University management (February 2021)
 - Formal comments and approval procedure (RGL meeting → Director's Board → Scientific Board, February – March 2021)



Institutional profile: Molecular and Structural Biology

Output targets:

Biomedicine Sustainable agriculture

Current research programs: Molecular Medicine Structural Biology Plant Systems Biology Neuroscience



Other principal topics

- Size of the institute and hiring policy
 - No physical space to expand number of groups (31 as of 1.1.2021)
 - At least one new group each two years essential for institutional viability
 - Upcoming generational change (7 out of 31 group leaders to reach legal retirement age within this decade)
- Science performance
 - Need to balance productivity and excellence; the productivity must be kept to a current level, while excellence should rather grow
 - Performance expectations (PE) on top publications and overal performance must be set up and monitored in mid-term (3 years) review
 - The worst performing RG(s) should be identified during the peer review external evaluation
- Grants strategy
 - Grants are essential for financial sustainability of research groups and represent the largest pillar of CEITEC MU funding
 - Focus on major individual grants (ERC, ERC-CZ, GAČR Expro, Wellcome Trust..)
 - Keeping success rate in all national grant schemes needed
 - Planning to be done for next institutional projects (Horizon Europe, Operational Programme currently no open schemes)
- Governance and internal culture
 - Opportunity to further flatten the structure for institutional policy debates
- [≫] <u>⊨</u> What functional role for programmes/departments?

