



UNIVERZITA
KARLOVA
V PRAZE

Prof. Jan Škrha
Charles University, Prague

**International Research Collaboration and It's Impact
on Higher Education**

About Charles University

- Founded by the Roman Emperor and the Bohemian King Charles IV in 1348;
- The oldest university in Central Europe;
- Comprehensive in scope, offering more than 300 accredited degree programmes;
- The largest and the best-performing research institution in the Czech Republic.



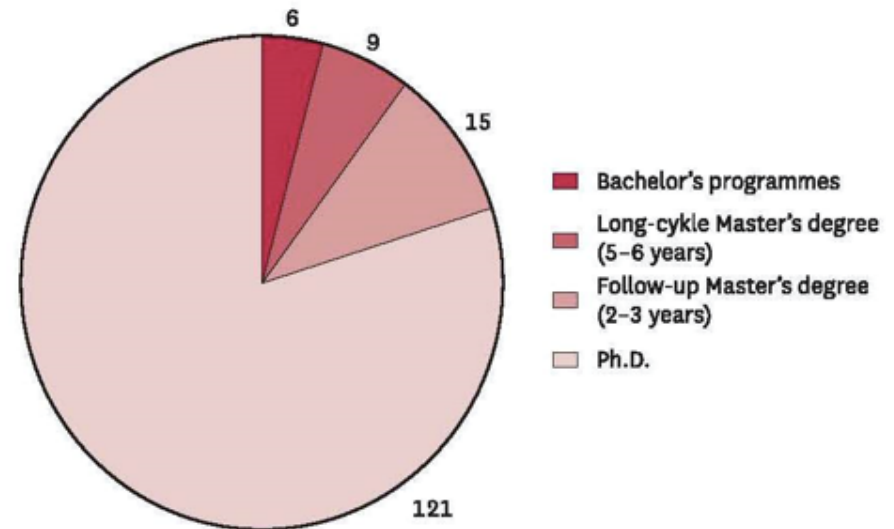
About Charles University

- **17** faculties;
 - + **4** institutes;
 - + **5** other teaching and research centres;
- **8,100** employees;
- **4,600** of those academic and research staff;
- **50,000+** students;
- **8,000+** graduates per year.



Study in foreign languages

- Over 170 programmes in foreign languages (mainly English);
- Students at Charles University come from 70+ countries around the world;
- Charles University 5th most popular European university in Erasmus+ programme.



Study - 2016

- The bachelor's programs: **18,000+** students
- The non-structured master's programs: **15,000+**
- The follow-up master's programs: **9,000+**
- Postgraduate doctoral programs: **7,600+**
- The highest numbers of students: medicinal and pharmaceutical courses, social sciences and science-focused and educational courses



Research at Charles University

- **ERC grants**

 - Faculty of Science*

 - Consolidator Grant (Mass Spectrometry of Isomeric Ions)
 - Starting Grant (Layered functional materials - beyond graphene)

 - Faculty of Mathematics and Physics*

 - Starting Grant (Trans-Spin NanoArchitectures: from birth to functionalities in magnetic field)

- **3,970** articles indexed in WoS;

- **5,151** articles indexed in Scopus;

- **76** is value of H-Index at CUNI;

- Currently Charles University participated in **over 100** projects funded by the EU's 7th Framework Programme and **35** H2020 projects.



Research Priority Areas

- Particle and nuclear physics;
- Mathematical simulation and methods for discerning calculation;
- Research of cardiovascular diseases;
- Clinical and experimental surgery;
- Research of metabolism;
- Experimental and clinical research in oncohematology;
- Rare hereditary diseases;
- Neuroscience;
- OptoSpintronics;
- Egyptology;
- Centre for Biblical Studies;
- Jean Monnet Centre of Excellence;
- Geography.



New Research Centres

Project **BIOCEV: Biotechnology and Biomedicine Centre**

Joint Research Centre:

- Academy of Sciences of the Czech Republic
(Institute of Molecular Genetics)
- Charles University
 - Faculty of Science, Charles University
 - Ist Faculty of Medicine, Charles University
- Cooperation with other institutes



BIOCEV

Project in numbers

- **400** researchers
- **200** students
- **5** research programs
- **56** research teams
- **5** state of the art core facilities
- Tech transfer department

Funding

- Funded by European Regional Development Fund (through OP RDI – Ministry of Education)
- Estimated total project cost: **100 mil. EUR**
- EU Funding: 80 mil. EUR



New Research Programme

PRIMUS

- The main aim: to encourage young researchers with international experience to establish new research groups and laboratories;
- Selected young scientists will be enabled to run their own independent projects during a period of 3-5 years;
- One of the long-term goals is to increase the success rate of the University in attracting major international grants (e.g. ERC grants).



International Cooperation



International Cooperation

- International Joint Master and PhD programs, cotutelles:
 - e.g. Charles University acts as co-ordinator of recently accredited joint degree: MA European Politics and Society (co-operation of Charles University, Leiden University, University Pompeu Fabra Barcelona and Jagiellonian University);
 - Joint degree programmes with several German universities;
 - 11 new „cotutelles“ agreements in 2016 with universities in France, Germany, Belgium, Switzerland, Poland, Spain, the Netherlands, Italy, Brazil and Finland.



International Cooperation

- **Post-doc programme** at CU – targeted at young international researchers;
- Erasmus+ mobility (approx. **1,800 incoming** and **1,300 outgoing** students per year);
- **130 international researchers** from 23 partner universities at CU in 2016;
- **Strategic partnerships with 14 universities** including Heidelberg University, KU Leuven, Leiden University, Peking University etc.;
- About **200 bilateral agreements** with universities all over the world.

Research ↔ **Education**



Strategic Partnership of CU

- **Australia:** University of Melbourne
- **Austria:** Universität Wien
- **Belgium:** Katholieke Universiteit Leuven
- **Brazil:** Universidade de São Paulo
- **Canada:** McGill University
- **Federal Republic of Germany:** Humboldt-Universität Berlin; Universität zu Köln; Universität Heidelberg
- **Israel:** Hebrew University of Jerusalem
- **Netherlands:** Leiden University
- **People's Republic of China:** Peking University, Beijing
- **Poland:** Uniwersytet Jagielloński, Krakow
- **Sweden:** Karolinska Institutet
- **United Kingdom:** University of Oxford



Opportunities for development

- 1/ intensive collaboration with strategic partners
common projects with incorporation of students**
- 2/ increase the number of PhD students spending several months
at partner institution abroad (joint-degree or double degree)**
- 3/ increase the number of foreign researchers coming to CU
(lectures, research collaborating activities)**
- 4/ increase the number of post-doc researchers funded by CU
and their educational role for local research**



Charles IV 700th Anniversary

May 2016



New strategic plan for CU involving
enlargement of international cooperation
in the research and education



Opens the door for collaboration between
institutions without frontiers



Thank you for your attention



www.cuni.cz