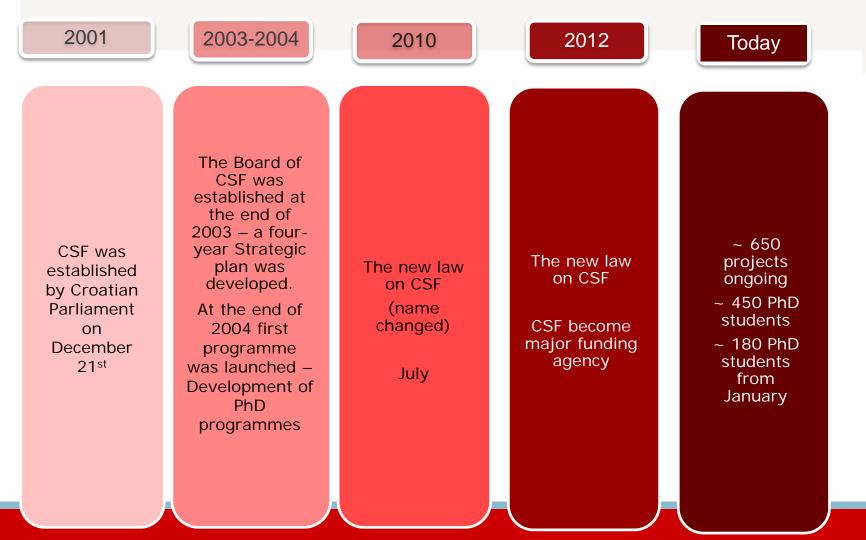


# Hrvatska zaklada za znanost (HRZZ) Croatian Science Foundation (CSF)

dr. sc. Lovorka Barać Lauc

## **About CSF**



# Main goal and mission

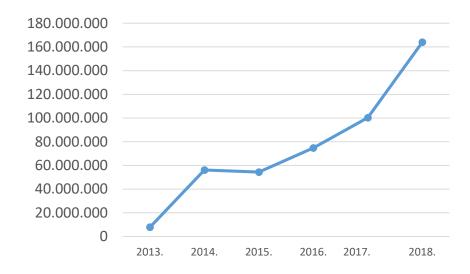
The Foundation's main mission is to promote science, higher education and technological development in Croatia in order to ensure the development of economy and support employment.



Source: Act On The Croatian Science Foundation (NN 117/2001, 46/2009, 92/2010, 78/2012) To accomplish its basic purpose, the Foundation shall ensure financial support for basic, applied and developmental research on the topics of strategic importance for the Republic of Croatia and the research fellowships.

# Role of the CSF in financing research projects

In 2013, the CSF started implementing calls for national research projects and, from 2014, funding PhD students.



Funds disbursed for financing projects (2013-2018) in HRK

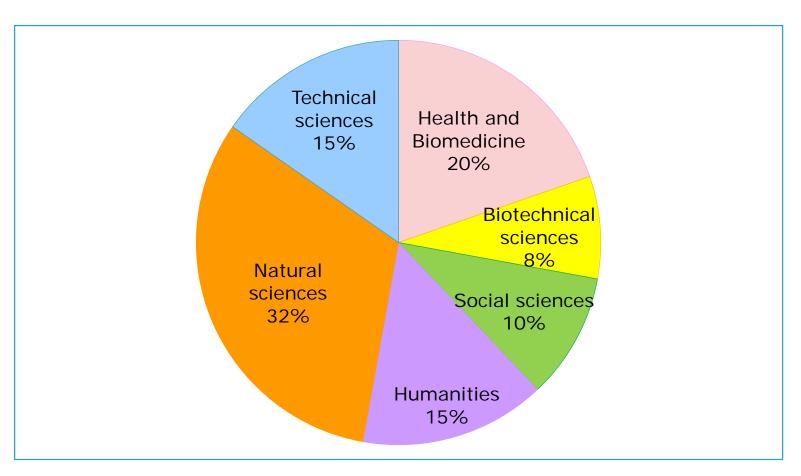
**UKF Programmes** 

o Program of Financing Research **Research Projects** and Development Activities in Research Projects 0 the Field of Climate Change **Brain Gain Installation Research Projects** 0 Partnership in Research 0 **Partnership** Young Researchers' Career Development Project – Training of Doctoral 0 **Training of Doctoral** Students **Students** International Tenure Track Pilot Croatian-Swiss Research 0 programmes Programme Programme **Development of Croatian** Support to researchers for 0 **Transition** 0 **Professional Terminology** the application to the ERC programmes

Scientific Cooperation

**Research Projects** Re: 0 Funding of basic and applied research in all scientific fields. Themes are not predefined. **Brain Gain** Ins 0 Goal: internationally competitive projects, support for scientific collaboration and formation Pa 0 of new research groups. **Partnership**  Duration: 4 years • Funding per project: up to 1.500.000,00 HRK You 0 **Training of Doctoral** (approx. 200.000,00 EUR). Do **Students** International Croatic 0 programmes Programme Programme **Development of Croatian** 0 Support to researchers **Transition Professional Terminology** for the application to the **ERC** programmes Scientific Cooperation **UKF Programmes** 0

## Financed projects per scientific area



o Program of Financing Research **Research Projects** Research Projects and Development Activities in 0 the Field of Climate Change Installation December **Brain Gain** 0 Proj **Program of Financing Research and Development Activities in the Field of** Pa 0 **Partnership** Climate Change Support for R&D activities in the area of Yo ctoral 0 **Training of Doctoral** mitigation and adaptation to climate change. St **Students**  Analyses and proposals of innovation are expected in order to increase energy International efficiency and use of renewable energy 0 programmes sources, reducing greenhouse gas emissions in the industry, agriculture and other sectors. Programme is financed by the Environmental D€ for 0 **Transition** Pr Protection and Energy Efficiency Fund. ERC 10 projects are financed. **UKF Programmes** Sciè

**UKF Programmes** 

o Program of Financing Research **Research Projects** Research Projects and Development Activities in 0 the Field of Climate Change Installation Research **Brain Gain** 0 **Projects Installation Research Projects** Partne 0 **Partnership** young scientists, up to 7 years of postdoctoral education Young 0 **Training of Doctoral** to establish a new lab or research group Doctor **Students** support from the institution 2 mil HRK 5 years International Croatia 0 programmes Programme rrugramme **Development of Croatian** 0 Support to researchers for **Transition** 0 **Professional Terminology** the application to the ERC programmes

Scientific Cooperation

0

 Program of Financing Research **Research Projects** and Development Activities in Research Projects 0 the Field of Climate Change Installation Research **Brain Gain** 0 **Projects** Partnership in Research 0 **Partnership** to increase the non-governmental Young 0 **Training of Doctoral** investments in research (public or Doctor **Students** private sector) Co-financing for partner – minimum of International Croatia 50% of the total value of the project 0 programmes Progran **Development of Croatian** Support to researchers for 0 **Transition** 0 **Professional Terminology** the application to the ERC programmes

**UKF Programmes** 

o Scientific Cooperation

Research Projects	0	Research Projects	and I	ram of Financing Research Development Activities in	
Brain Gain	0	Young Researchers'     Programme - develo	pmen <sup>-</sup>		
Partnership	0	F	<ul> <li>students financing system.</li> <li>Increasing the number of young researchers.</li> <li>Funding of doctoral students' gross salary, with the primary aim of the completing a doctorate thesis.</li> </ul>		
Training of Doctoral Students	0	the primary aim of the			
International programmes	0	<ul> <li>Up to 4 years.</li> <li>Around 450 PhD students.</li> <li>180 in couple months.</li> </ul>		re financed so far and	
Transition	0	Development of Croatian Professional Terminology	0	Support to researchers for the application to the ERC programmes	
UKF Programmes	0	Scientific Cooperation			

Program of Financing Research **Research Projects** and Development Activities in Research Projects 0 nange Croatian-Swiss Research **Brain Gain** Insta 0 **Programme** Swiss and Croatian researchers Parti 0 jointly prepare project proposals. **Partnership** 400.000 CHF (for each project, a g of Your 0 maximum of 50% of the grant may **Training of Doctoral** Doct go to the Swiss partner). **Students** Project duration: up to 3 years. International Croa 0 programmes Progra **Development of Croatian** 0 Support to researchers **Transition Professional Terminology** for the application to the **ERC** programmes **UKF Programmes** Scientific cooperation

Program of Financing Research **Research Projects** Rese/ 0 **Tenure Track Pilot Programme Brain Gain** 0 Support excellent young researchers at the early stage of career - help them gain 0 competences for the employment in the **Partnership** positions of professors or senior scientists at universities and scientific institutes. 0 **Training of Doctoral Students** Personnel costs, equipment and maintenance costs, mobility allowance, research costs and overheads are financed International 0 Model for career development of excellent programmes scientists. 4 to 5 projects are to be financed. 0 **Transition UKF Programmes** Scientific cooperation

**Research Projects** 

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**Partnership** 

**Brain Gain** 

Training of Doctoral Students

International programmes

**Transition** 

**UKF Programmes** 

Research Projects

 Program of Financing Research and Development Activities in the Field of Climate Change

Support to researchers for the application to the ERC programmes - Short-term visits to the PIs of approved ERC projects are financed.

- Croatian visiting researcher: active researcher with internationally recognised results.
- The financing includes EUR 2.000,00 per month for the accommodation and living expenses and costs of round ticket.
- Financing is approved for 3 to 4 mounts.
- 4 visits are financed.

**Professional Terminology** 

the application to the ERC programmes

## Calls in 2018

Tenure Track
Pilot
Programme

Research projects

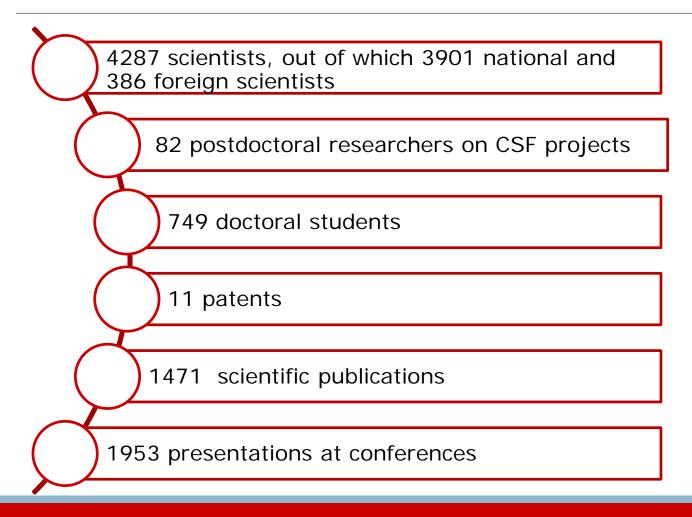
## **ESF**

- Young researchers career development
- Scientific collaboration

Partnership in research

Support to researchers for the application to the ERC programmes

# Project results in 2017 (611 funded projects)



# Projects on the scope of energy and power grids

Neven Duić "Energy independent Croatia based on high penetration of Renewable Energy Sources and demand response technologies"

## **Igor Kuzle**

"Flexible energy nodes in low carbon smart grid" Mario Vašak " Controlbased Hierarchical Consolidation of Large Consumers for Integration in Smart Grids"

## **Bojan Malarić**

"Smart Grid metrology infrastructure"

Igor Kuzle "Integracija vjetroelektrana u elektroenergetski sustav sa smanjenom tromosti"

### **Bojan Baletić**

"Innovative Green Building Research in the Campus Living Lab"

## Hrvoje Pandžić

"Advanced integration of renewable sources" Ivo Uglešić "Development of advanced high voltage systems by application of new information and communication technologies"

#### Hrvoje Kozmar

"Wind and sea loads on energy structures"

### **Tomislav Capuder**

"Sustainable concept for integration of distributed energy storage systems"

## Ivan Rajšl

"Implementation of Peer-to-Peer Advanced Concept for Electricity Trading" Frano Barbir "Water and Heat Management and Durability of PEM Fuel Cells"

#### Hrvoje Pandžić

"Electric Vehicle Battery Swapping Station"

#### Dinko Vukadinović

"Wind-Solar System for Optimized Residential Electric Generation"

#### Jadranko Matuško

"Computationally Efficient Predictive Control of Power Converters in Microgrids "

## Thank you for your attention!

