



L'Oréal-UNESCO For Women in Science 2013

The best young Czech female scientists this year for the seventh time divided three-quarters of a million Czech crowns

Prague 23 May 2013 - The L'Oréal-UNESCO For Women in Science stipend program has over the past 7 years already become a traditional project supporting the work of gifted Czech female scientists. In Bohemia, the stipend has been awarded to 21 women so far (including this year's recipients), supports their scientific work and eases their everyday life. The total amount divided has already surpassed five million Czech crowns. In 2013, we have awarded seminal research projects from the area of medicine (protection of the foetus from toxic substances in the mother's body and the early diagnosis of immunity defects) or from the area of combinatorics (we can find a practical application for instance in the protection of credit cards). In the Czech Republic, the For Women in Science Programme supports women scientists at the beginning of their careers with the aim of finding new talented people and supporting them in building their academic careers. The project sets its aim as to create from female scientists a potential model for young girls and motivate them in the selection of their future occupation.

"Science of one of the main pillars of L'Oréal; we invest in it the most of the entire cosmetic industry. There are 3,600 scientists working for us at 19 research (and 16 evaluation) centres all over the work. Only in the last year, these scientists together registered 611 patents. Young talented people represent our future, we are therefore proud that we can support the best of them," explains Country Managing Director for L'Oréal Czech Republic, Laurent Boukobza.

The laureates awarded this year represent very different areas of science, but they have one thing in common: they have achieved singular results, and thus have become inspirations for the next generation and raise also the scientific community in the Czech Republic.

The specialised jury comprised of representatives of the Academy of Sciences of the CR, the Czech Commission for UNESCO and L'Oréal Czech Republic awarded the three best projects with a stipend, always of CZK 250,000.

A total of 34 candidates registered for the stipend programme this year. Nine finalists got into the narrower selection and received the chance to present their projects to the jury in person. The best projects were selected by a professional jury comprised of the representatives of the Academy of Sciences of the Czech Republic, who this year was presided over by Prof. RNDr. Blanka Říhová, DrSc. Also representatives of the Czech Commission for UNESCO and General Director of L'Oréal for the Czech Republic, Slovakia and Hungary, Laurent Boukobza, were seated in the jury.

"I happily confirm that the projects submitted have held a constantly high level. It is evident that the works of all of the young scientists, who made it to the finals, have their place among the foremost research being done in the Czech Republic." added Prof. RNDr. Blanka Říhová, DrSc. regarding this year's event.

Laureates of the stipends L'Oréal For Women in Science 2012



Ing. Lubomíra Balková, Ph.D.

- works at the Faculty of Nuclear and Physical Engineering of the Czech Technical University in Prague.

Lubomíra Balková is by her focus a mathematician – at the university, she teaches the history of mathematics, linear algebra and cryptology. Her long-term research and main topic of the project, which she submitted, is the application of combinatorics to the words in cryptology. In practice, it is the generation of random numbers in so-called hash functions or assignment to a long report of a short impression. *“Both of these topics are very topical today. Moreover,*

both the generator of random numbers and the hash function are areas of cryptology, which are really used in practice, for instance in the protection of credit cards or digital signature.”



PharmDr. Martina Čečková, Ph.D.,

- works at the Faculty of Pharmacy in Hradec Králové.

The scientific activity of Martina Čečková deals with medicinal transporters – proteins in cellular membranes, which protect our tissue from possible toxic effect. *“Specifically, we deal with transporters, which are present in the placenta and protect the foetus from toxic substances in the body of a pregnant woman. At the same time, we deal with the interactions of medicines with medicinal transporters, which are in cancer cells.”*



MUDr. Eva Froňková, Ph.D.,

- works at the Clinic of Paediatric Haematology and Oncology at Motol.

The project, which Eva Froňková submitted to the L'Oréal For Women in Science Programme, investigates defects of immunity: *“We want to use so-called massively parallel sequencing for research. The output should be the identification of new genes, responsible for immunodefects but also the great acceleration of diagnostics, which is crucial primarily for the most severe forms of disease in infancy.”*