

**IN MEMORIAM IRUTĖ MEŠKIENĖ**  
(1956–2017)

*„Mokslui, kaip ir menui, reikia laisvės. Dailininkas negali suplanuoti, kokį paveikslą nupieš ir kiek spalvų naudos. Tačiau mokslininkams panašūs reikalavimai pateikiami, nors atlikdami tyrimus jie negali numatyti, ką atras. Kai teritorija nežinoma, visa nauja informacija savaime yra naudinga“.*

„Science, as an art, demands freedom. The painter cannot plan what image to draw and how many colours to use. Indeed, scientists have similar requirements, as they cannot predict what they are going to find by research. When the territory is unknown, all the new information is in itself useful“. Irutė Meškienė („Lietuvos žinios“, 28 May 2014).

On 2 July 2017, Prof. Dr Habil. I. Meškienė passed away at her home in Vilnius. She was a researcher, who had a profound knowledge of plant molecular biology, and dedicated her research career to finding out how plants “feel” and sense their environment. She mainly investigated the role of protein phosphatases in regulating signal transmission in cells.

I. Meškienė was born on 10 August 1956 in Vilnius. She acquired her early education at Vilnius Secondary School No. 31. She entered Vilnius State University in 1974. After graduation, she got a diploma of biologist and lecturer of biology and chemistry in 1979. Her deep interest in plant genetics and molecular biology had started already in her early student years. She continued studies as a postgraduate student at the Institute of Botany in Vilnius, and simultaneously at the Laboratory of Prof. Yuri Gleba of the M. N. Cholodny Institute of Botany of the Ukrainian Academy of Sciences (Kiev). She defended her thesis “Nuclear and cytoplasmic gene transcriptional genetics in *Nicotiana* somatic hybrids”, and got a doctoral degree in genetics in 1985. Just after, she became a researcher at the Laboratory of Cell Engineering of the Institute of Botany in Vilnius, and continued her research work there till 1989. As a postdoc, she worked at the Biological Re-



search Centre, Szeged (Hungary) and the University of Alberta, Edmonton (Canada). In 1992, she joined the group of Prof. Heribert Hirt at the Department of Microbiology and Genetics of the University of Vienna. She became a research group leader at the famous Max F. Perutz Laboratories (Vienna Biocenter) in 2002, and made habilitation at the University of Vienna in 2005 (supported by a Charlotte-Bühler Habilitation fellowship received from the Austrian Science Fund).

I. Meškienė was a devoted teacher loved and respected by her students. In 1997, she started teaching at the University of Vienna. In 2001, she taught in London, the UNESCO course “Signalling to growth and cell division in *Arabidopsis*”. During more than 35 productive years, I. Meškienė has published more than 40 scientific papers in international journals and supervised numerous students in Vienna and Vilnius. She even continued teaching courses at the University of Vienna while struggling against terminal illness during the last months of her life.

Under her supervision, Kotryna Kvederavičiūtė (2010), Sima Kokalaitė (2012), Justinas Šimulis (2012), Laura Dudkaitė (2013), Mindaugas Krikščiukas (2014), Jovita Elzbutaitė (2014), Severina Marija Pociūnaitė (2016), Sofija Semeniuk (2016), Lukas Valančauskas (2016), Vaida Jašinskaitė-Koženiauskienė (2017), Lukas Gerasimavičius (2017) obtained their BSc degree at the University of Vilnius. Rainer Hubmann (1996), Markus Brandstötter (1998), Walter Glaser (1998), Alois Schweighofer (1998), Heinrich Jelinek (2001), Zahra Ayatollahi (2007), Verena Unterwurzacher (2010) got their MSc degree at the University of Vienna, and Kotryna Kvederavičiūtė (2012) at the University of Vilnius.

Under her supervision, Alois Schweighofer (Thesis: Regulation of plant wound signal transduction by PP2C-type phosphatases. Vienna, 2003), Vaiva Kazanavičiūtė (Thesis: Functional analysis of an *Arabidopsis* PP2C phosphatase. Vienna, 2006), Chonnanit Choopayak (Thesis: Characterization and functional analysis of a novel PP2C phosphatase AP2C2 from *Arabidopsis*. Vienna, 2008), Julija Umbrasaitė (Thesis: PP2C regulates cell developmental decisions. Vienna, 2009), Zahra Ayatollahi (Thesis: Dual control of MAPK signalling by PP2C- and DSP-type protein phosphatases in *Arabidopsis thaliana*. Vienna, 2010), Justyna Boniecka (Thesis: Functional studies of *Arabidopsis thaliana* protein phosphatases of the type 2C. Vienna, 2014) and Volodymyr Shubchynskyy (Thesis: MAPK phosphatases control plant immune responses. Vienna, 2015) obtained PhD degree.

Despite her successful career abroad, she was maintaining close ties with Lithuania: she constantly visited Vilnius University to deliver lectures to students, led their scientific work and collaborated with other Lithuanian researchers. In 2008, she published a student's book "Biochemistry and molecular biology of plants". In 2010, she became a Professor at Vilnius University, and a Senior Researcher at the Institute of Biotechnology of Vilnius University.

In her scientific activity, I. Meškienė focused on the topic of signal transmission in plant cells. Her main passion was the following questions: How plants adapt to and cope with environmental stress? How signals from outside the cell are transmitted to the nucleus to adjust gene expression? By using the model plant *Arabidopsis thaliana*, she revealed the role of

certain protein phosphatases in regulating signal transduction during stress conditions and the development and differentiation of stomata. Her findings on the protein phosphatases and kinases were published in high impact journals, and are highly cited. Her scientific projects were supported by the Austrian Science Fund, the European Union, the Austrian Ministry of Education, the British Council, the Lithuanian State Science and Studies Foundation, the Research Council of Lithuania and Lithuania-Switzerland cooperation programme. In 2010, I. Meškienė's scientific and educational achievements were acknowledged by the Achievement Awards for Lithuanians Living Abroad by the Ministry of Education and Science of the Republic of Lithuania.

As a colleague, I. Meškienė was always joyful, helpful with a deep passion for her profession. She is greatly missed by her colleagues, friends, her son Domantas Meškys and husband Alois Schweighofer, with whom she had collaborated in science over years and shared many activities, including a deep interest in Indian culture and spirituality.

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