



To the 80th jubilee of **Anna Valentynivna Elska,** Full Member of NAS of Ukraine

On October 15, Anna Valentynivna Elska, the editor-in-chief of our journal, the Full Member of the NAS of Ukraine, a globally renowned scientist celebrates her 80th birthday.

Anna Valentynivna Elska was born on October 15, 1940 in Donetsk. After graduating from the Donetsk Medical University with top honours in 1963, she started her scientific work as a postgraduate, then as a junior researcher and later a researcher of the Institute of Biochemistry of the Academy of Sciences of the Ukrainian SSR, one of whose departments became the Sector of Molecular Biology and Genetics of the D.K. Zabolotny Institute of Microbiology and Virology, the AS of the Ukrainian SSR in 1973, and then the Institute of Molecular Biology and Genetics of the NAS of Ukraine. Anna Valentynivna has been devoting all her life to this Institute, labouring her way from senior researcher (1973), to the head of the department (1978), Deputy Director for Science (1996), Director of the Institute (2003–2019) – to Honorary Director of the IMBG of the NAS of Ukraine, the Advisor of the Directorate and chief researcher of the Department of Structural and Functional Proteomics at the IMBG of the NAS of Ukraine (since 2019 – to the present day).

Anna Valentynivna is a holder of all the scientific degrees and titles: PhD (biology) (1968), D.Sc. (biology) (1976), Professor (1986), Corresponding Member of the NAS of Ukraine (1988), the Full Member of the NAS of Ukraine (1992), Laureate of the State Prize of the Ukrainian SSR in the field of science and technology (1986), Honorary Worker of Science and Technology of Ukraine (1998). She has received many state and field-related awards: Certificate of Merit from the

Verkhovna Rada of Ukraine (2004), Gold Medal of the Ukrainian Federation of Scientists (2005), European Quality Award and the Diploma of the European Business Assembly (2009), Diploma of the NAS of Ukraine for Scientific Achievements (2010), the Order of St. Andrew the Apostle, III degree (2012), the Certificate of Acknowledge of the Prime Minister of Ukraine for achievements in domestic science development (2013), the Orders of Princess Olga, II and II degree (2008, 2015), Vernadsky Gold Medal of the NAS of Ukraine for outstanding achievements in the field of molecular biology and bioelectronics (2016), Woman of Ukraine Award 2016 in the “Science and Education” nomination (2017).

Prof. Elska, the Full Member of the NAS of Ukraine, is one of the founders of a new trend in molecular biology research – the regulation of genome expression in higher eukaryotes at the translational level and the role of specific components of the translational apparatus in its operation. In 1991, she received the Diploma for the discovery from the State Committee for Inventions and Discoveries of the USSR for discovering such a scientific phenomenon as functional adaptation of tRNA. In recent years, a spatial structure of one of the major factors of protein biosynthesis in animals has been discovered under her guidance, and relevant differences from the bacterial analogue have been determined along with the functional specificities of its carcinogenic form.

The other direction of Prof. Elska’s activity is related to molecular bioelectronics and analytical biotechnology. The fundamental research of the interactions between biological macromolecules and the surfaces of electro-

chemical transducers laid the foundation for the elaboration of novel biosensors – a new generation of analytical devices for medical diagnostics, the needs of biotechnology, food industry, and environment protection.

The Full Member of NAS of Ukraine, A.V. Elska, made an invaluable contribution into founding and developing such scientific directions as genomics, molecular and cellular biotechnology, bioinformatics, and biomedicine in Ukraine. One of her greatest achievements as a scientist and scientific strategist is her participation in numerous international projects and programmes, making the IMBG of the NAS of Ukraine a partner in extensive cooperation with prominent scientists of the world, including the implementation of many projects in the EU Framework Programmes.

Six D.Sc. and 28 Ph.D. theses were defended under her guidance.

The creative developments of the scientist cover over 400 scientific articles, including 6 monographs, dozens of inventor's certificates, and patents.

A. V. Elska is very active in scientific organizational and public work, successfully performing the duties of the Vice-President of the Ukrainian Biochemical Society, the Head of the Specialized scientific Ph.D. and D.Sc. thesis council at the IMBG of the NAS of Ukraine; a member of the Scientific Council at the IMBG of the NAS of Ukraine; the Head of the Scientific Council of the NAS of Ukraine for sensor systems and technologies; a member of the Committee

for awarding the prizes of the Cabinet of Ministers of Ukraine for elaboration and implementation of innovative technologies; a member of the Committee of state prizes of Ukraine in science and technology; a member of the International Council on Biotechnology and Biodiversity, IAAS; an expert of the Science and Technology Council of the Ministry of Education and Science of Ukraine on issues of forming and implementing the state orders for scientific and technical products in the priority direction of developing science and technology "Biology, Biotechnologies, Food"; a member of the Council for scientific and technical development of Ukraine; an expert of the EU-Ukraine Joint Committee on Science and Technology Cooperation (JCSTC); the head of the NASU scientific and technical programme "Sensor systems for medico-ecological and industrial-technological requirements: metrological support and experimental operation"; the head of the scientific support group for the NASU complex programme "Molecular and cellular biotechnologies for the requirements of medicine, industry, and agriculture"; an editorial board member of scientific journals *Ukrainica Bioorganica Acta* and *the Bulletin of Vavilov Society of Geneticists and Breeders of Ukraine*; editorial council member of scientific journals *Ukrainian Biochemical Journal* and *Biotechnologia Acta*.

The scientific community, friends, colleagues, and disciples congratulate Anna Valentynivna heartily on her jubilee and wish her good health, realization of her numerous ideas, and many happy returns of the day.