

Dear distinguished guests, colleagues, and friends!

First I would like to thank you for honouring us with your presence and for travelling with us to the moment more than half a century ago when the National Institute of Biology, then called the Institute of Biology at the University in Ljubljana, was born. My predecessors as well as the founders of the institute never gave up hope facing **difficult times that naturally have also occurred before**. Therefore, I'm convinced that employing the energy, resilience and determination drawn from our past and carried into our future we will avoid the lightning that has been launched from the tops of our government and has been also directed to strike science **at the precise moment we need it most in order to help us out of the crisis!** Today of course **I do not wish to discuss the politics, economic crisis, or the crisis of values!** Us here at NIB have the values and maintain them – our values are the curiosity and the knowledge we are creating. I personally believe that the two are guiding us through the complex paths of the evolution toward the sustainable development of our civilization.

Therefore, I should dedicate more words to biology, the science that many only remember from school books and soon thereafter forget and certainly do not comprehend its enormous significance for our present existence. Biology is a science of life that has long ago outgrown its narrow frame and has spilled over into as well as fused with other sciences such as biophysical, pharmaceutical, and medicinal sciences where the understanding of biomolecules and the laws that govern the functioning of the living cells are critical for the development of these sciences as much as to be used directly in sick patient care! When conventional medications are no longer effective and we cannot prevent epidemiological events such as cancer illness we are stopped right here: at the inadequate knowledge of cell biology and cell function!

Biology is also extending into other areas of our every day existence such as **biotechnology of food and food safety** that today is more important and more questionable to us than ever before. It is frightening to look into the components of our food and their unknown effects. When the advanced technologies bring us genetically modified products, we accept them without hesitation in case of medications, meet

them with harsh bias in case of our food, and display a complete ignorance in case of their release and integration into the natural environment, which in fact is the biggest danger of their use due to our inadequate understanding – we stumble again over the lack of our knowledge of biology!

When nowadays we are frightened observers of powerful storms, typhoons, devastating draughts as well as the other signs of the global warming and the climate change that have become a regular part of our daily news, we become aware that it is the Nature where the balance is broken between the living and non-living matter and where fast changes are taking place within the living ecosystems. The latter may be at the same time a consequence as well as the reason for the changes – which makes us pause again in face of the inadequate knowledge of biology! This is why today I would like to stress the importance of the basic research in biology, and would like to take this opportunity to thank the Slovenian Academy of Sciences and Arts (SAZU) for its patronage in our scientific research work, more specifically the research that is geared toward understanding the basic principles in biology.

In the meanwhile and parallel to the above mentioned events, new and formerly entirely unknown domains of biology are emerging from our knowledge, such as synthetic biology, systemic biology and bioinformatics, bionics, and biology of biosensors that are all available to the present economy and ready to be exploited in practice. This is why we are constantly transferring our knowledge into the business sector – when it's needed and if it's needed. Some of our colleagues are particularly well tuned to these needs which is visible in our ever growing number of business partnerships, especially in frame of several Centres of Excellence (CO), growing number of patents, and in a this year's expansion of the Technology Transfer Office at NIB. The latter is supporting our efforts to exchange the knowledge with the high technology enterprises which is of critical importance to faster development of technology and economy. However, it is important to keep in mind that the scientists cannot be entirely turned into the economists since this would be equally foolish as expecting the economists being turned into scientists. Let me borrow the thought of my colleague Jadran Lenarčič who said »While the economist must possess

one idea and needs to believe in it strongly, the scientists must have many ideas and doubt them thoroughly!«* This clearly illustrates that there are two separate worlds who despite their differences can and must maintain a creative dialog!

We understand that our mission is also the obligation to transfer our knowledge to a younger generation, therefore we educate our young researchers in various skills that the life demands. These new doctors of science who are going to receive their awards today and who arise directly from our scientific work, are an important driving force of the innovation and development in Slovenia, as we like to say – although it seems as if our social environment gives them less and less recognition and allows them to move abroad in masses, without a chance of ever returning what we have invested in them. Sadly, any attempts to stop this process remain too weak. Let me use this opportunity to remind those at the very top of the Slovenian politics and the Slovenian Research Agency (ARRS) that by cutting the public financial support for science and development they are surely cutting the branch that we all sit on – not only the scientists but all citizens of Slovenia! Moreover, this kind of scientific research policy - if one can still call it this way – is in stark contrast with the research politics in more developed countries in the world as well as in Europe, which in the present times of recession and financial crisis are still investing in science so they could as soon as possible harvest the fruits of their development-oriented economies.

Let me mention also some other such as the BRIC countries and especially Brazil, not only in honour of our honourable guest his Excellency the Ambassador of Brazil Gilerto Muora Neto but also because it is the country where I have recently returned from and where I have learned that the goal of the Brazilian government and its agencies is to build young researchers and developers by intensifying the international student exchange and at the same time re-assuring the conditions for their return and work at home! This is the only right way which is well recognized here at NIB who is already acting globally and maintains that the partnership with Brazil is an interesting and great opportunity for Slovenia in general.

Almost half of our effort is directed toward using the knowledge and developing the skills for collaboration with the professional offices at various ministries who are employing our areas of expertise and where we are maintaining our scientific and professional independence! At large this represents the ministry lead by the **Minister Mag. Dejan Židan**.

Let me conclude with the words of our well known academic Prof. Robert Blinc who sadly passed away this year. He said when asked about the role of science in resolving the crisis that the science itself is not going to resolve neither the ecological or financial global crisis but it is important to know that the crisis cannot be resolved without the science! It is well known that the science alone is increasing general knowledge and its use and that it enables the society as well as the individuals to adapt to changes and survive, which is not at all an estranged thought to the biologists!

I wish that this afternoon each one of you will catch some new thoughts, meet some old acquaintances and some new faces and rejoice. After all it is the Saint Martin's day when cider turns into wine which of course is yet another contribution of biology - coming from the tiny microorganism called yeast!

Tamara Lah Turnšek