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30 September 2025

Subject: A testimonial on Assoc. Prof. RNDr Tomáš Szemes, PhD.

Dear Professor Fedor,

In accordance with the assignment, I have carefully reviewed the *curriculum vitae*, pedagogical and scientific record, as well as the submitted materials of Assoc. Prof. RNDr. Tomáš Szemes, PhD., presented within the framework of his inauguration proceedings in the field of molecular biology. The documentation demonstrates his long-standing, systematic, and highly qualified contributions to molecular biology, genetics, genome analysis, and bioinformatics. In this report, I will evaluate his profile across four main areas as requested.

a) Teaching Activities

Assoc. Prof. T. Szemes has been a dedicated and innovative academic teacher at the Faculty of Natural Sciences, Comenius University in Bratislava, for many years. In the field of pedagogy, he has distinguished himself not only as a lecturer of fundamental courses in molecular biology and genetics but also as the creator of new, forward-looking courses reflecting the latest advances in genome biology, sequencing technologies, and bioinformatics.

A major strength of his teaching is the integration of theory with practice, providing students with direct exposure to real research projects and laboratory work. His extensive experience in supervising bachelor's, master's, and doctoral theses is evident in the success of his graduates, many of whom continue their studies at leading institutions both in Slovakia and abroad. His pedagogical engagement has thus significantly advanced the training of a new generation of molecular biologists in Slovakia.

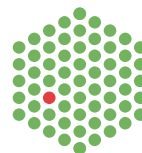
His approach is modern and progressive: he has introduced courses in English, developed e-learning resources, and actively fostered interdisciplinary integration of biology, informatics, and medicine.

b) Scientific Work and Establishment of a Research School

The scientific achievements of Assoc. Prof. T. Szemes are clearly above average in the Slovak academic environment. His research has been published in high-quality international journals indexed in Web of Science and has attracted a notable number of citations.

His primary research interests include molecular diagnostics, genome technologies, and the study of circulating nucleic acids. Of particular significance is his contribution to the development of *liquid biopsy* methods and the application of 'fragmentomics' in clinical practice.

Equally important is his success in establishing a strong research school focused on genome analysis and bioinformatics. As a doctoral supervisor, project coordinator, and guarantor of key research activities, he has built and led a team that operates effectively at both the national and international level. This demonstrates his capacity for scientific leadership and underlines his potential as a university professor.



c) Linking Research with Practice

One of the most remarkable aspects of Assoc. Prof. T. Szemes's career is his ability to translate academic research into clinical and industrial practice. He has played a pivotal role in implementing sequencing and molecular biology methods in oncology, virology, and personalized medicine.

As co-founder and leader of the Comenius University Science Park, he has created a dynamic environment where academic research, technology transfer, and collaboration with industry converge. Through these initiatives, he has significantly advanced the integration of modern molecular-genetic methods into diagnostic and clinical practice in Slovakia.

This dimension of his work is of exceptional importance, reflecting the expectations placed on professors as not only scientists but also societal leaders capable of connecting research with real-world applications.

d) Overall Profile in the Context of a University Professor

In my view, the overall academic and professional profile of Assoc. Prof. Tomáš Szemes fully meets, and in many respects exceeds, the requirements for appointment as a university professor. He is an internationally recognized scientist, an outstanding teacher shaping future experts, a leader of research teams, and an accomplished manager of research infrastructure.

His career trajectory reflects consistent and systematic growth: from early research contributions, through habilitation, to the establishment of strong research capacities and representation of Slovakia in European ESFRI-type projects such as ELIXIR and Genome of Europe.

Assoc. Prof. Tomáš Szemes embodies the essential attributes of a university professor:

- internationally recognized scientific achievements,
- proven excellence in teaching and doctoral supervision,
- establishment of an independent research school,
- capacity to connect academic research with practice, and
- representation of Slovakia in the European research landscape.

Conclusion and Recommendation

Based on the foregoing analysis, I conclude that Assoc. Prof. RNDr. Tomáš Szemes, PhD. is a distinguished academic personality, who fully satisfies the requirements for appointment as a university professor in the field of molecular biology. His scientific, pedagogical, and organizational contributions transcend the national framework and are fully comparable with European standards.

I therefore strongly and unequivocally recommend that Assoc. Prof. RNDr. Tomáš Szemes, PhD. is appointed **Professor of Molecular Biology**.

With best regards,

Dr Vladimír Beneš