

PERSONAL DATA

Birthdate: August 06, 1993
Birthplace: Kecskemét, (Hungary)
Citizenship: Hungarian
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EDUCATION

- **2019-:** PhD student, Interdisciplinary Doctoral School (University of Szeged, Albert Szent-Györgyi Health Center and Faculty of Medicine, Department of Medical Microbiology, Educational and Research Center, Hungary; supervisor: Dr. Spengler Gabriella)
- **2017-2019:** studies in Biology M.Sc., University of Szeged (Hungary), Faculty of Sciences and Informatics; speciality: molecular-, immune- and microbiology
- **2012-2017:** studies in Biology B.Sc., University of Szeged (Hungary), Faculty of Sciences and Informatics

LANGUAGE KNOWLEDGE

English (intermediate)
Spanish (beginner)

EDUCATIONAL ACTIVITY

- teaching medical microbiology practice to dental students in Hungarian and English
- teaching medical microbiology practice to pharmacy students in Hungarian and English

CONFERENCES

- 3-5 July, 2019: Annual Meeting of the Hungarian Society for Microbiology; poster: J. Ámon, N. Szemerédi, E. Bokor, Cs. Vágvölgyi, Zs. Hamari: Obtaining of hxnSΔ hxnTΔ hxnRc7 and hxnSΔ hxnTΔ hxnYΔ hxnRc7 multi-deletion mutants in *Aspergillus nidulans*
- 4 November. 2020: COST Action 17104 (STRATAGEM) WG3 Meeting - International Online Symposium on “New Therapeutic Tools Against Preclinical Models of Multidrug Resistant Tumors; online előadás: N. Szemerédi, A. Kincses, J. Viktorova, E. Domínguez-Álvarez and G. Spengler: Resistance modulating activity of selenoesters in bacteria
- 14-16 October, 2020: Annual Meeting of the Hungarian Society for Microbiology; poster: N. Szemerédi, A. Kincses, K. Rehorova, J. Viktorova, E. Domínguez-Álvarez and G. Spengler: Selenoesters as potential quorum sensing-inhibiting and anti-biofilm compounds in bacteria

- 9-12 July, 2021: 31st European Congress of Clinical Microbiology & Infectious Diseases; poster: N. Szemerédi, A. Kincses, K. Rehorova, L. Hoang, N. Salardón-Jiménez, C. Sevilla-Hernández, J. Viktorová, E. Domínguez-Álvarez and G. Spengler: Ketone- and cyano-selenoesters as potent antibacterial and anticancer agents
- 6-8 September, 2021: COST, Grant Period 3 Annual Conference; poster: N. Szemerédi, A. Kincses, S. Dobiasová, G. Tóth, J. Viktorová, E. Domínguez-Álvarez and G. Spengler: Selenoesters as efflux pump inhibitors in cancer cells
- 13-15 October, 2021: 6th Central European Forum for Microbiology, Hotel Aranyhomok, Kecskemét, Hungary; lecture/poster: N. Szemerédi, A. Kincses, G. Tóth, E. Domínguez-Álvarez and G. Spengler: Selenoesters as efflux pump inhibitors in bacteria and cancer cells
- 21 October, 2021: American Society for Microbiology - ASM Early-Career Flash Talk Event; online lecture: N. Szemerédi, A. Kincses, E. Kristóf, G. Tóth, E. Domínguez-Álvarez and G. Spengler: Selenoesters as efflux pump inhibitors in bacteria
- 12-14 October, 2022: Annual Meeting of the Hungarian Society for Microbiology; lecture/poster: N. Szemerédi, S. Dobiasová, J. Viktorova, H. Gbelcová, E. Dominguez-Álvarez, G. Spengler: Reversal of multidrug resistance with selenium compounds in 2D and 3D tumor cell cultures

SCHOLARSHIPS, WORKSHOPS

- 19 January - 14 February, 2020: COST Action 17104 STSM scholarship (University of Chemistry and Technology, Prague). Supervisor: Dr. Jitka Viktorova

Research topic: Anticancer and antibacterial activity of selenocompounds

- 5-6 November, 2020: Online Training School - 3D cell models – a powerful tool to study MDR; COST Action 17104
- April, 2021: MMT Young researcher article competition – shared first place; article: N. Szemerédi, A. Kincses, K. Rehorova, L. Hoang, N. Salardón-Jiménez, C. Sevilla-Hernández, J. Viktorová, E. Domínguez-Álvarez and G. Spengler: Ketone- and Cyano-Selenoesters to Overcome Efflux Pump, Quorum-Sensing, and Biofilm-Mediated Resistance; *Antibiotics* 2020, 9 (12), 896; <https://doi.org/10.3390/antibiotics9120896>
- 1 September, 2021 - 31 January, 2022: New National Excellence Program of the Ministry for Innovation and Technology from the source of the National Research (5 month)

Research topic: Reversal of bacterial multidrug resistance with selenium compounds

- 1 October, 2021 - 31 January, 2022: EFOP 3.6.3-VEKOP-16-2017-00009 project, PhD student scholarship (4 month)

- 2-12 November, 2021: Short research grant by the Visegrad Project (Modulation of multidrug resistance and post-treatment regeneration stimulated by natural compounds, project number: 22010090); (University of Chemistry and Technology, Prague). Supervisor: Dr. Jitka Viktorova

Research topic: Preparation and handling of 3D cell cultures

- 20 December, 2021: Workshop II of Natural Products Chemistry Group, Faculty of Pharmacy, Lisbon; lecture: Selenocompounds as anti-virulence agents in bacteria

- 1 September, 2022 - 31 January, 2023: New National Excellence Program of the Ministry for Innovation and Technology from the source of the National Research (5 month)

Research topic: Reversal of multidrug resistance in 2D and 3D cell cultures

PUBLICATIONS

MTMT: 10074640