Enikő Lőrincz-Besenyei -Curriculum Vitae

Personal postal address:

Laboratory postal address: Julius Kühn-Institut, Erwin Baur Str. 27, 06484, Quedlinburg **E-mail address:** besenyei.eniko@yahoo.com or enikoe.loerincz@julius-kuehn.de

Phone:

Nationality:

Date of birth:

Research interests: genome editing (CRISPR/Cas9), viral based genome editing, potato, protoplast, DNA repair

EDUCATION

15/07/2018- present

Researcher in a BMBF founded project: ”Development of a viral-based CRISPR/Cas-system for potato (DeviCCpo)”
Leibniz Institute DSMZ-German Collection of Microorganisms and Cell Cultures VirusInteract Research Group, Braunschweig

01/10/2013- 30/09/2020

Ph.D. student, Integrative Biology Doctoral School
Babes-Bolyai University, Cluj-Napoca, Romania

01/10/2011-01/10/2013

Master of Science, Molecular Biotechnology
Babes-Bolyai University, Cluj-Napoca, Romania

01/10/2008-01/10/2011

Bachelor of Science, Biology
Babes-Bolyai University, Cluj-Napoca, Romania

LANGUAGES

Mother language: Romanian, Hungarian

Other languages: English-B2/C1; German-B2/C1; French-B2 (Certificat Européen de Competence Linguistique en Langue), Romanian-C2;

RESEARCH EXPERIENCE AND SCHOLARSHIPS

From 01.09.2017 to 20.04.2018 involved in two research projects at Julius Kühn-Institut, Quedlinburg.

Research fellowship offered by the German Federal Environmental Foundation (Deutsche Bundesstiftung für Umwelt DBU), research at Julius Kühn-Institut, Quedlinburg (20.08.2016-19.08.2017) in Dr. Thorben Sprink and Dr. Frank Hartung' s laboratory (research on genome editing, potato protoplast, meiosis and gene expression in potato).

Research assistant (01.03.2016-01.09.2016) in a Project financed by the Romanian Authority for Scientific Research, CNCS UEFISCDI (Project Number: PNII-ID-PCE-2011-3-0586).

Research mobility at Julius Kühn-Institut, Groß-Lüsewitz (01.01.2015-31.03.2015) and Agricultural Institute, Centre for Agricultural Research, Hungarian Academy of Sciences, Martonvásár, Hungary (01.08.2015-15.12.2015) financed by POSDRU/159/1.5/S/133391.

DOMUS research fellowship offered by the Hungarian Academy of Sciences (MTA), research at Agricultural Institute, Centre for Agricultural Research, Hungarian Academy of Sciences (MTA) Martonvásár, Hungary (from 01.11.2014 to 08.12.2014).

Ph.D. Scholarship offered from Sectorial Operational Program for Human Resources Development 2007–2013, co-financed by the European Social Fund, under project POSDRU/159/1.5/S/133391-‘Doctoral and postdoctoral excellence programmes for training highly qualified human resources for research in the fields of Life Sciences, Environment and Earth’.

Volunteer researcher at Oncology Institute, Cluj-Napoca, Romania (from 01.08.2013 to 01.02.2014).

Scholarship offered from Balassi Institut, Hungary for research at Eötvös Lóránd University, Budapest (01.03.2012-06.04.2012).

INTERNATIONAL STUDY

International Summer Language School German, University of Applied Sciences, Osnabrück, 2016.

Course in „Writing Scientific Papers in English“, Eötvös Lóránd University, Budapest, 2012.

Scholarship for Hungarian Summer University, Eötvös Lóránd University, Budapest, 2011.

SKILLS

- Genome editing with CRISPR/Cas9
- protoplast isolation and regeneration
- RTqPCR
- genomic in situ hybridisation (GISH)
- statistical analysis, basic knowledge in R software
- fluorescence microscopy
- cloning
- Agrobacterium mediated plant transformation
- microsatellite analysis
- PAGE (polyacrylamide gel electrophoresis), PCR ELISA
- different bioinformatic tools (ex: CLC Workbench, FinchTV, NCBI, Snappgene, RStudio)

Selected publications:

1. Rakosy-Tican, E. *, **Lörincz-Besenyei, E.***, Molnár, I.*, Thieme, R.*, Hartung, F., Sprink, T., Antonova, O., Famelaer, I., Angenon, G., and Aurori, A.* (2019). New phenotypes of potato co-induced by mismatch repair deficiency and somatic hybridization. *Front Plant Sci* 10, 3. doi: 10.3389/fpls.2019.00003. **IF: 4.402. *equal contribution**
2. Molnár, I., **Besenyei, E.,** Thieme, R., Thieme, T., Aurori, A., Baricz, A., Banciu, H.L., and Rakosy-Tican, E. (2017). Mismatch repair deficiency increases the transfer of antibiosis and antixenosisproperties against Colorado potato beetle in the somatic hybrids *Solanum tuberosum* (+) *S.chacoense*, Pest Management Science, Accepted Author Manuscript. doi:10.1002/ps.4473. ***IF:2.811***
3. Cristea, V., **Besenyei, E**., Jarda, L., Farkas, A., Marcu, D., Clapa, D., Halmagyi, A. and Butiuc-Keul, A. (2019). *In Situ* genetic variability and micropropagation of *Cerastium banaticum* (Rochel) Heuff. (Caryophyllaceae)– a Rare and Endemic Species from Romania, Acta Biologica Cracoviensia Series Botanica 61/1: 53– 62. **IF=1.111**
4. **Lörincz-Besenyei, E.**, Mehdi, R., Sprink, T., Sonnewald, U. and Krenz, B. (2020) Developing a viral based genome editing tool for editing, Plant Biology Europe EPSO/FESPB 2020 (postponed to 2021 due COVID-19) Congress, Turin, Italy (**Awardee of the FESPB Support Grant**).

5. **Lörincz-Besenyei, E.**, Metje-Sprink, J., Sprink, T., Sonnewald, U. and Krenz, B., (2019) Inducing mutations in potato *via* genome editing in demand of climate change, COST Action 1st PlantEd Conference, Plant Genome Editing - State of the Art 5th – 7th November 2019 Novi Sad, Serbia-Abstract book pg 61.
6. **Lörincz-Besenyei, E.**, Mehdi, R., Sprink, T., Sonnewald, U. and Krenz, B., (2019) Tomato bushy stunt virus (TBSV) based ribonucleoproteins (RNPs) delivery in potato, 51. Jahrestreffen des arbeitskreises “Viruskrenkenheiten der Pflanzen“, 25. bis 26. März 2019, Goettingen, pg.18.