



УНИВЕРЗИТЕТ У НОВОМ САДУ  
UNIVERSITY OF NOVI SAD

## TOP ACHIEVEMENTS 2021

### FACULTY OF EDUCATION

---

#### Published paper - Subtyping Blastocystis in pigs and humans revealed unusual avian-specific subtype ST6 in humans in Serbia

Zoonoses and Public Health, 06 Apr 2021, 68(5):544-548 DOI:  
10.1111/zph.12829 PMID: 33822468

Tamaš Šili, Gordana Kozoderović, Aleksandar Potkonjak, Dejan Vidanović, Vuk Vračar, Nataša Miladinović Tasić

---

Blastocystis is a common protist colonizing the gastrointestinal tract of humans and various animals. The first subtyping of Blastocystis isolates in pigs and humans in Serbia revealed unusual avian-specific subtype ST6 in humans. In total, 48 pig faecal specimens collected on seven pig farms and 50 human faecal specimens positive to Blastocystis by microscopic examination were selected for the study. Eleven randomly selected PCR-positive pig samples and 10 samples from human patients (with gastrointestinal complaints) were subjected to SSU rDNA sequencing. Three subtypes were identified (ST3, ST5 and ST6) by phylogenetic analysis. ST5 was found in all pig samples; while in human samples, we detected ST3 and ST6. The latter subtype is relatively uncommon in Europe and highly adapted to avian hosts; therefore, the possibility of sporadic zoonotic transmission to human patients should not be ignored.

